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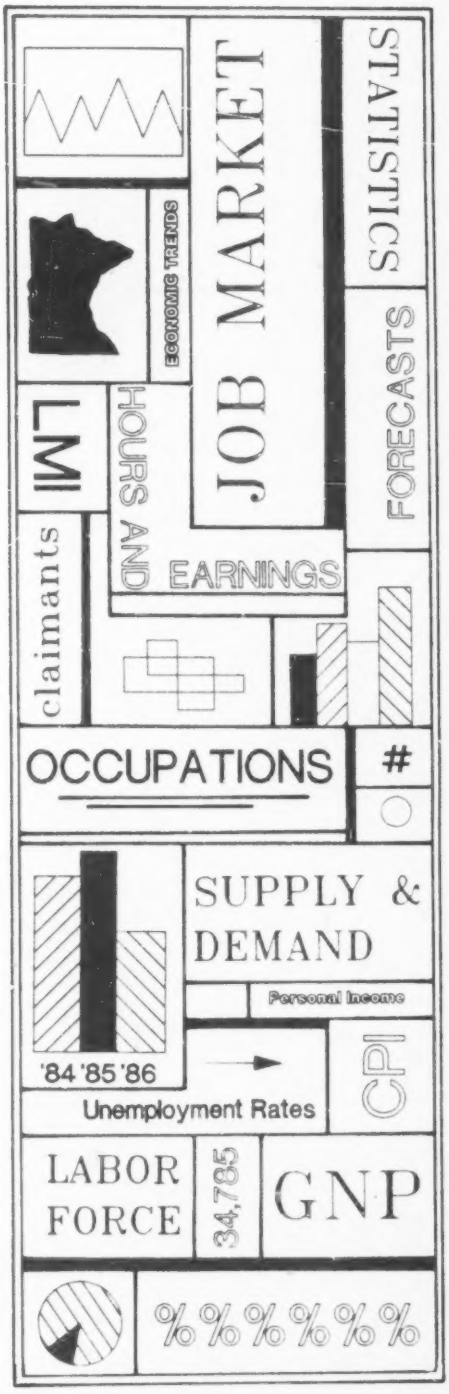
Minnesota Labor Market Review

Quarterly Issue
November 1987



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State unemployment rate rises to 6.0 percent in October, page 1.

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The largest firms employ fewer workers than in 1977, and Minneapolis-St. Paul gains a greater share of the state's employment and number of employers, page 15.

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The 26 page Minnesota Labor Market Review is published quarterly by the Research and Statistics Office of the Minnesota Department of Jobs and Training, 390 North Robert Street, St. Paul, Minnesota 55101. The 8 page Review is published during the other eight months. Copies are available without charge by writing the editor.

Articles on labor market conditions and the economic welfare of Minnesota workers or general economic conditions within the state are welcome. Articles should be submitted complete with tables and graphs. Length should not exceed 8 double-spaced typewritten pages, including graphs, references, and notes. The editorial board reserves the right to edit articles for length and clarity.

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Analysis of National and State Economic Conditions

By Ben Boyle

Nation

Surge In October Payroll Employment Overshadows Small Rise In Unemployment Rate

According to the Department of Labor's household and establishment surveys conducted during the week of October 12, the nation's economy was quite robust before the stock market plunge. The huge gain of 549,000 in seasonally adjusted nonfarm payroll employment was the largest monthly increase in 4 years and was twice the average monthly rise over the past year. This gain was partly due to the return of striking teachers. Although the seasonally adjusted unemployment rate rose 0.1 of a point to 6.0 percent in October, the small rise was attributed to an increase in the number of persons looking for jobs. Employment in manufacturing rose healthily for the fourth consecutive month in October and has risen by 222,000 since June.

Stock Market Drop Does Not Appear To Have Hurt Economy YET

Except for the sharp drop in housing starts in October which may have been partly a result of the stock market crash, any weaknesses that appeared in other indicators in October were caused by other events. Consumer spending which would be expected to show any adverse effects quite early was flat in October because of the end of auto sales incentive programs. Retail sales fell slightly for the same reason. On the other hand, industrial production rose healthily in October because of increased auto output. The main cause of the sharp decline in housing starts in October was the rise in mortgage rates during September and October.

State

Rise In Unemployment Rate May Not Indicate Weakening Economy

Although Minnesota's seasonally adjusted unemployment rate rose for the third consecutive month in October and matched the nation's rate for the first time since October 1973, local economists did not view the situation as significant. One belief is that the rise in the rate was due to statistical problems that arise periodically. Another explanation is that when employment is climbing persons who previously were not looking for work and therefore not counted as unemployed resume their job search and are then counted as unemployed. Also, the unduplicated count of unemployment insurance claimants for October shows that the total number of claimants (not seasonally adjusted) has fallen steadily from January through October and that claimants have been below their year ago levels for sixteen straight months.

Payroll Employment Rises Sharply In October And The Third Quarter

Seasonally adjusted nonfarm payroll employment rose by 11,800 in October after gains of 5,400 in September and 7,000 in August. In the third quarter, payroll employment surged by 23,500 after an increase of only 2,300 in the second quarter. Although three-fourths of the October rise in payroll employment was in the services, trade and government sectors, employment in manufacturing posted its second straight sizeable gain. Over two-thirds of the October advance in factory employment was in durable goods, particularly in transportation equipment and lumber and wood.

Note: Civilian labor force estimates for the United States and Minnesota appear in the Statistical Section on page 20.

Labor Force and Establishment Data

	MINNESOTA (Numbers in Thousands)			UNITED STATES (Numbers in Thousands)		
	III QTR 1987	Percent Change from		III QTR 1987	Percent Change from	
		Last Qtr.	Year Ago		Last Qtr.	Year Ago
Labor Force Estimates						
Total Labor Force						
Actual	2,259.9	0.0	1.6	121,201	1.2	1.6
Seasonally Adjusted	2,239.5	-0.2	1.7	120,038	0.4	1.6
Employment						
Actual	2,155.8	0.1	1.3	114,069	1.6	2.6
Seasonally Adjusted	2,118.8	-0.7	1.3	112,860	0.6	2.6
Unemployment						
Actual	104.1	-2.3	8.9	7,133	-3.9	-12.4
Seasonally Adjusted	120.7	10.3	9.3	7,178	-3.5	-12.4
Unemployment Rates						
Actual	4.6	-2.1	7.0	5.9	-4.8	-13.2
Seasonally Adjusted	5.4	10.2	8.0	6.0	-3.2	-13.0
Other Rates of Labor Utilization						
Participation Rt. (Labor Force/Population (16+)	69.8	-0.4	1.0	65.6	0.2	0.5
Full Employment Deficit - Percent of Workers1/	0.6	0.7	0.3	1.9	2.2	2.8
Manpower Utilization Rate2/	84.8	0.6	1.0	83.4	0.3	1.1
Nonagricultural Wage & Salary Positions						
Employment (Seasonally adjusted)	1,950.4	1.0	2.9	102,271	0.6	2.5
Mining	6.5	19.8	7.0	751	2.3	0.1
Construction	81.2	0.0	8.7	4,994	-0.3	1.1
Manufacturing	371.8	0.4	0.9	19,137	0.6	1.0
Durables	220.1	1.1	0.7	11,239	0.6	0.4
Nondurables	151.7	-0.6	1.2	7,898	0.8	2.0
Trans., Comm., & Public Utilities	99.0	1.2	1.2	5,375	0.5	2.8
Trade	482.6	0.8	2.4	24,087	0.4	1.9
Fin., Ins., & Real Estate	121.4	1.1	3.5	6,621	0.7	4.3
Services	471.0	1.4	4.8	24,267	1.1	4.3
Government	316.9	0.9	2.4	17,039	0.0	2.1
Average Weekly Hours (Seasonally adjusted)						
Mining	43.6	4.6	4.3	42.1	-0.2	0.5
Construction	38.5	-4.0	2.1	37.8	-0.5	-1.3
Manufacturing	40.9	0.7	0.2	40.8	-0.2	0.2
Durables	42.1	0.7	0.7	41.3	-0.2	0.0
Nondurables	39.3	0.8	-0.5	40.2	0.5	0.8
Trans., Comm., & Public Utilities	36.7	-0.3	0.8	39.2	0.5	0.3
Trade	30.5	1.3	1.0	31.6	0.3	0.6
Fin., Ins., & Real Estate	n.a.	n.a.	n.a.	36.2	-0.3	-0.3
Services	n.a.	n.a.	n.a.	32.5	0.0	0.3
Average Hourly Wage						
Mining	12.81	-0.4	-0.4	12.38	-0.4	-1.0
Construction	15.37	-0.7	4.4	12.68	0.7	1.8
Manufacturing	10.42	-0.3	2.9	9.92	0.5	2.1
Durables	10.82	0.3	3.0	10.45	0.5	1.9
Nondurables	9.92	-0.6	2.6	9.20	0.8	2.6
Trans., Comm., & Public Utilities	12.58	2.5	2.6	12.04	0.9	2.9
Trade	7.87	1.7	2.7	7.05	0.3	2.0
Fin., Ins., & Real Estate	n.a.	n.a.	n.a.	8.76	0.7	5.0
Services	n.a.	n.a.	n.a.		0.4	4.0

1/ Four percent is a generally agreed upon criteria for measuring full employment. It allows for the movement of persons between jobs. Labor Force Unemployment Rate less four percent, based on official estimates.

2/ Estimated worker hours expended in nonfarm payroll employment as a percent of potential worker hours assuming that each member of the nonfarm labor payroll labor force was employed at a standard rate of 40 hours per week.

Minnesota Nonagricultural Wage & Salary Employment, Hours & Earnings

INDUSTRY	EMPLOYMENT1/ (thousands)			PERCENT CHANGE FROM		PRODUCTION WORKERS' HOURS & EARNINGS2/					
						Average Weekly Earnings		Av. Hourly Earnings		Average Weekly Hrs.	
	Oct. 1987	Sept. 1987	Oct. 1986	Sept. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986
Total Nonagricultural	**1,996.6**	**1,982.1**	**1,930.7**	**0.7**	**3.4**	-	-	-	-	-	-
Manufacturing	**377.0**	**382.5**	**372.8**	**-1.4**	**1.1**	**431.78**	**417.79**	**10.48**	**10.24**	**41.2**	**40.8**
Durable Goods	223.8	224.0	221.3	-0.1	1.1	454.49	439.30	10.77	10.56	42.2	41.6
Lumber and Furniture	21.6	22.2	19.7	-2.4	9.8	501.68	446.71	11.86	10.79	42.3	41.4
Stone, Clay and Glass	8.9	9.0	8.6	-1.7	3.5	441.98	435.72	10.65	10.55	41.5	41.3
Primary Metals	6.4	6.5	6.1	-2.1	4.8	411.61	406.50	9.55	9.52	43.1	42.7
Fabricated Metals	34.6	34.4	33.8	0.7	2.4	511.60	489.30	11.87	11.65	43.1	42.0
Nonelectrical Machinery	77.3	77.4	80.2	-0.2	-3.6	468.99	458.71	11.14	11.08	42.1	41.4
Office and Computing	36.7	37.0	40.6	-0.8	-9.7	538.78	516.24	11.92	11.95	45.2	43.2
Electrical Machinery	28.4	28.3	26.5	0.2	7.1	362.08	358.56	8.58	8.64	42.2	41.5
Transportation Equipment	9.7	9.6	8.9	1.2	8.6	534.97	503.11	12.27	11.81	43.6	42.6
Scientific Instruments	30.3	30.2	30.8	0.4	-1.5	421.69	416.53	10.26	10.11	41.1	41.2
Misc. Manufacturing	6.7	6.3	6.8	5.5	-1.4	397.71	378.43	9.82	9.23	40.5	41.0
Nondurable Goods	153.2	158.6	151.5	-3.4	1.1	403.20	391.23	10.08	9.83	40.0	39.8
Food and Kindred	45.8	51.1	46.0	-10.4	-0.5	366.20	348.53	8.91	8.67	41.1	40.2
Textiles and Apparel	4.9	5.0	4.9	-2.6	-0.1	261.36	265.86	7.20	6.63	36.3	40.1
Paper and Allied	33.1	33.4	32.8	-0.8	1.1	495.46	487.14	11.91	11.71	41.6	41.6
Printing and Publishing	44.2	43.8	43.1	0.7	2.4	407.13	397.70	10.63	10.25	38.3	38.8
Chemicals and Petroleum	11.0	11.1	10.5	-0.3	5.4	465.71	468.37	11.79	11.68	39.5	40.1
Rubber, Plastic & Leather	14.2	14.1	14.2	0.4	0.0	344.27	327.61	8.76	8.69	39.3	37.7
Nonmanufacturing	**1,619.5**	**1,599.6**	**1,557.9**	**1.2**	**4.0**	-	-	-	-	-	-
Mining	7.1	7.1	6.1	-0.3	17.2	563.05	536.35	12.71	12.62	44.3	42.5
Metal Mining	4.8	4.7	3.8	1.1	27.3	618.27	597.82	13.77	14.20	44.9	42.1
Construction	93.0	94.7	86.1	-1.8	7.9	599.85	602.70	15.50	15.03	38.7	40.1
Transp., Comm., Pub. Util.	100.9	100.6	98.7	0.3	2.2	-	-	-	-	-	-
Transportation	65.7	65.5	65.1	0.3	1.0	-	-	-	-	-	-
Trucking & Warehousing	26.8	26.9	26.7	-0.6	0.4	406.11	390.33	11.84	12.01	34.3	32.5
Comm. & Public Util.	35.2	35.1	33.7	0.2	4.5	569.54	559.48	14.31	14.20	39.8	39.4
Trade	490.4	492.8	475.5	-0.5	3.1	241.98	230.70	7.96	7.69	30.4	30.0
Wholesale	121.3	121.4	118.2	0.0	2.6	421.40	407.55	10.75	10.45	39.2	39.0
Retail	369.0	371.4	357.3	-0.6	3.3	190.84	180.95	6.84	6.58	27.9	27.5
Building Materials	18.4	18.7	17.4	-1.6	5.6	335.34	303.71	8.28	8.46	40.5	35.9
General Merchandise	52.7	50.2	50.5	4.9	4.2	160.58	179.14	6.20	6.33	25.9	28.3
Food Stores	49.7	50.1	48.1	-0.6	3.5	223.86	194.70	8.17	7.08	27.4	27.5
Automotive	40.3	40.8	39.2	-1.1	2.8	313.17	340.20	8.58	9.00	36.5	37.8
Apparel	19.1	18.9	18.6	1.3	2.7	118.05	118.33	5.44	5.19	21.7	22.8
Home Furnishings	16.4	16.1	15.7	1.5	4.5	287.70	221.90	8.22	7.00	35.0	31.7
Eating and Drinking	123.1	127.4	120.1	-3.4	2.5	124.52	103.23	5.21	4.65	23.9	22.2
Fin., Insur., Real Estate	122.3	122.2	118.7	0.1	3.0	-	-	-	-	-	-
Finance	57.6	57.5	55.7	0.2	3.4	-	-	-	-	-	-
Insurance	44.2	44.0	43.2	0.4	2.3	-	-	-	-	-	-
Real Estate	20.6	20.7	19.9	-0.8	3.5						
Services	479.1	478.0	455.5	0.2	5.2						
Personal Services	26.7	26.3	24.0	1.3	11.0						
Business Services	89.5	88.5	83.9	1.1	6.7						
Repair Services	20.3	20.2	18.8	0.7	8.0						
Health Services	149.6	149.3	143.1	0.2	4.6						
Hospitals	51.0	51.0	50.1	0.1	1.8						
Nursing Homes	41.6	41.7	40.2	-0.2	3.5						
Legal Services	14.4	14.4	13.8	0.0	4.7						
Private Education	26.6	22.7	26.0	16.9	2.4						
Government	326.8	304.1	317.3	7.5	3.0						
Federal	32.7	32.7	32.8	0.1	-0.4						
State	81.1	71.1	78.7	14.0	3.0						
Education	45.1	34.8	43.5	29.6	3.7						
Local	213.0	200.3	205.8	6.3	3.5						
Education	116.6	102.3	110.9	13.9	5.1						

1/ Totals may not add because of rounding.

2/ Average earnings data are on a "gross" basis and are derived from reports of payroll for full-time and part-time production or non-supervisory workers. The payroll is reported before deductions of any kind. Bonuses, retroactive pay, tips, payment in kind, and "fringe benefits" are excluded.

Analysis of Local Conditions

Minneapolis–St. Paul MSA

By Kevin Alaspa

Unemployment Increases Along With Employment And The Labor Force

Although employment in the Twin Cities metropolitan statistical area rose in October, the total labor force grew even more, causing both the number and percentage of unemployed to increase. October represented the third consecutive month in which the unemployment rate in the metropolitan area has risen. Even though the monthly increases have been relatively small, this short-term trend has not followed the typical seasonal pattern in which the rate of unemployment remains relatively stable in the early fall months.

Education Leads Industries In Employment Gains

Total wage and salary employment rose modestly in October, and gains that took place occurred in both private and public education, as public and non-public schools, colleges and universities added workers. Otherwise, employment changes in the various industrial categories were relatively small. Manufacturing employment dropped slightly, particularly in the nondurable goods sector. Construction employment was unchanged, and should experience seasonal declines in upcoming months. Wholesale and retail trade posted a small increase, as did the services sector. In other industry categories, no significant gains or losses were noted.

If upcoming months follow normal trends, seasonal layoffs will cause unemployment to rise further. Current unemployment levels are not considered unduly serious, although the current national economic situation has made it more difficult to predict near-term trends. Although it is too soon to tell what the effects of recent stock market declines will be on employment in the Twin Cities area, certain industries may be directly affected. For example, if Christmas sales are not as robust as usual due to declining consumer confidence, retail sales employment may not achieve usual seasonal levels in December.

LABOR FORCE ESTIMATES

AREA	EMPLOYMENT			UNEMPLOYMENT			UNEMP. RATE		
	Oct. 1987	Sept. 1987	Oct. 1986	Oct. 1987	Sept. 1987	Oct. 1986	Oct. 1987	Sept. 1987	Oct. 1986
Mpls.-St.Paul MSA*	**1,278,838**	**1,271,481**	**1,276,010**	**58,622**	**55,701**	**47,870**	**4.4**	**4.2**	**3.6**
REGION 11	1,201,111	1,194,045	1,199,321	54,983	52,527	44,324	4.4	4.2	3.6
Anoka	119,072	118,371	118,894	5,379	5,253	4,792	4.3	4.2	3.9
Carver	21,694	21,566	21,662	820	796	743	3.6	3.6	3.3
Dakota	124,110	123,380	123,925	5,943	5,863	4,479	4.6	4.5	3.5
Hennepin	580,951	577,534	580,085	26,242	25,212	21,641	4.3	4.2	3.6
Ramsey	263,386	261,837	262,994	12,619	11,641	9,864	4.6	4.3	3.6
Scott	25,616	25,465	25,578	1,348	1,259	904	5.0	4.7	3.4
Washington	66,282	65,892	66,183	2,632	2,503	1,901	3.8	3.7	2.8
Chisago	13,181	13,103	13,161	776	708	600	5.6	5.1	4.4
Isanti	11,300	11,234	11,283	586	449	541	4.9	3.8	4.6
Wright	29,842	29,668	29,797	1,405	1,274	1,318	4.5	4.1	4.2
St. Croix, WI	23,404	23,431	22,448	872	743	1,087	3.6	3.1	4.6
Bloomington	**54,732**	**54,410**	**54,650**	**2,398**	**2,245**	**1,843**	**4.2**	**4.0**	**3.3**
Minneapolis	**207,221**	**206,002**	**206,912**	**10,441**	**10,289**	**8,584**	**4.8**	**4.8**	**4.0**
St. Paul	**142,994**	**142,153**	**142,781**	**8,075**	**7,454**	**6,251**	**5.3**	**5.0**	**4.2**

* Chisago, Isanti and Wright counties are a part of the Minneapolis-St.Paul MSA, and are also included in Region 7.

Note: Add employment and unemployment to calculate civilian labor force.

Mpls.–St. Paul Nonagricultural Wage & Salary Employment, Hours & Earnings

INDUSTRY	EMPLOYMENT1/ (thousands)			PERCENT CHANGE FROM		PRODUCTION WORKERS' HOURS & EARNINGS2/					
						Average Weekly Earnings		Av. Hourly Earnings		Average Weekly Hrs.	
	Oct. 1987	Sept. 1987	Oct. 1986	Sept. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986
Total Nonagricultural	**1,283.2**	**1,267.6**	**1,252.8**	**1.2**	**2.4**	-	-	-	-	-	-
Manufacturing	**253.5**	**254.1**	**253.1**	**-0.2**	**0.2**	**462.73**	**451.25**	**11.15**	**11.06**	**41.5**	**40.8**
Durable Goods	158.3	158.5	158.7	-0.1	-0.3	482.09	461.48	11.37	11.12	42.4	41.5
Lumber and Furniture	9.9	10.1	8.9	-2.5	10.5	545.96	473.61	12.38	11.17	44.1	42.4
Stone, Clay and Glass	3.5	3.5	3.2	-1.0	7.8	532.08	529.11	11.93	11.89	44.6	44.5
Primary Metals	5.1	5.1	4.9	-1.2	2.4	425.96	406.00	9.26	9.42	46.0	43.1
Fabricated Metals	27.1	26.9	26.3	0.6	2.9	536.21	518.87	12.47	12.18	43.0	42.6
Nonelectrical Machinery	61.2	61.4	63.1	-0.3	-3.0	497.03	464.30	11.75	11.38	42.3	40.8
Office and Computing	29.2	29.4	32.5	-0.6	-10.1	539.40	490.64	12.40	11.88	43.5	41.3
Electrical Machinery	16.0	16.0	15.2	0.2	5.2	372.94	377.40	9.03	9.25	41.3	40.8
Transportation Equipment	5.0	5.0	5.0	-0.1	0.9	678.00	632.51	15.00	14.15	45.2	44.7
Scientific Instruments	26.1	26.1	27.4	0.1	-4.9	427.28	431.59	10.55	10.45	40.5	41.3
Misc. Manufacturing	4.5	4.3	4.6	3.7	-1.7	409.50	366.91	10.50	9.58	39.0	38.3
Nondurable Goods	95.2	95.6	94.4	-0.4	0.9	434.16	436.61	10.80	10.97	40.2	39.8
Food and Kindred	18.6	19.0	18.3	-1.9	1.8	438.87	428.70	10.23	10.33	42.9	41.5
Textiles and Apparel	1.9	1.9	2.1	-1.6	-8.6	246.40	264.02	7.02	6.84	35.1	38.6
Paper and Allied	25.5	25.7	25.4	-0.6	0.5	464.20	459.68	11.49	11.35	40.4	40.5
Printing and Publishing	30.3	30.2	30.2	0.4	0.1	415.42	431.29	10.79	11.32	38.5	38.1
Chemicals and Petroleum	9.0	9.0	8.6	-0.4	5.1	500.52	518.16	12.90	12.70	38.8	40.8
Rubber, Plastic & Leather	9.8	9.7	9.7	1.1	0.7	413.70	391.82	9.85	9.97	42.0	39.3
Nonmanufacturing	**1,029.7**	**1,013.6**	**999.7**	**1.6**	**3.0**	-	-	-	-	-	-
Mining	0.9	0.9	0.9	-0.2	2.6	208.78	208.78	8.03	8.03	26.0	26.0
Construction	57.2	57.2	55.9	-0.1	2.2	629.42	643.58	16.74	16.63	37.6	38.7
Transp., Comm., Pub. Util.	68.3	67.9	66.8	0.7	2.2	-	-	-	-	-	-
Transportation	45.9	45.4	45.6	1.1	0.7	-	-	-	-	-	-
Trucking & Warehousing	15.5	15.5	15.6	0.1	-0.6	387.40	370.73	13.00	12.61	29.8	29.4
Comm. & Public Util.	22.4	22.5	21.2	-0.3	5.6	551.24	551.21	14.54	13.99	38.6	39.4
Trade	315.7	314.8	307.0	0.3	2.6	266.36	249.83	8.62	8.30	30.9	30.1
Wholesale	81.4	81.4	81.0	0.1	0.6	447.19	429.90	11.35	11.08	39.4	38.8
Retail	234.3	233.4	226.9	0.4	3.3	212.72	195.36	7.49	7.13	28.4	27.4
Building Materials	11.0	11.1	10.4	-1.3	5.4	373.73	320.71	9.32	9.35	40.1	34.3
General Merchandise	36.3	34.6	36.2	5.0	0.2	177.78	202.50	6.56	6.75	27.1	30.0
Food Stores	28.7	28.8	27.4	-0.3	4.8	239.97	235.76	8.54	8.42	28.1	28.0
Automotive	24.5	24.5	23.2	-0.2	5.5	409.86	395.97	10.35	10.05	39.6	39.4
Apparel	13.2	13.0	12.4	2.0	6.5	113.09	109.06	5.49	5.12	20.6	21.3
Home Furnishings	11.3	11.1	11.1	1.8	2.1	283.38	177.70	8.51	6.17	33.3	28.8
Eating and Drinking	78.6	80.2	77.1	-1.9	2.0	146.66	107.07	5.89	4.98	24.9	21.5
Fin., Insur., Real Estate	94.9	94.4	91.6	0.6	3.6	-	-	-	-	-	-
Finance	40.6	40.3	39.3	0.8	3.3	-	-	-	-	-	-
Insurance	37.3	37.1	36.2	0.6	2.9	-	-	-	-	-	-
Real Estate	17.1	17.1	16.1	0.1	6.2	-	-	-	-	-	-
Services	319.5	318.9	306.9	0.2	4.1						
Personal Services	18.6	18.3	16.5	1.5	12.8						
Business Services	78.4	77.1	74.3	1.7	5.6						
Repair Services	14.6	14.6	14.1	0.5	3.8						
Health Services	83.3	82.9	80.3	0.5	3.7						
Hospitals	29.7	29.6	29.7	0.4	-0.1						
Nursing Homes	22.7	22.5	21.9	0.8	3.7						
Legal Services	11.2	11.2	10.8	-0.3	3.6						
Private Education	15.4	14.5	16.4	6.6	-5.6						
Government	173.1	159.4	169.6	8.6	2.1						
Federal	20.0	19.9	19.7	0.5	1.4						
State	52.4	45.9	50.3	14.2	4.2						
Education	28.9	22.2	27.6	30.2	4.4						
Local	100.7	93.5	99.5	7.6	1.2						
Education	54.7	47.4	53.9	15.5	1.5						

1/ Totals may not add because of rounding.

2/ Average earnings data are on a "gross" basis and are derived from reports of payroll for full and part-time production or nonsupervisory workers. The payroll is reported before deductions of any kind. Bonuses, retroactive pay, tips, payment in kind, and "fringe benefits" are excluded.

Central and Northwest Minnesota

By Ron Daws

LABOR FORCE ESTIMATES									
AREA	EMPLOYMENT			UNEMPLOYMENT			UNEMP. RATE		
	Oct. 1987	Sept. 1987	Oct. 1986	Oct. 1987	Sept. 1987	Oct. 1986	Oct. 1987	Sept. 1987	Oct. 1986
St. Cloud MSA*	88,396	85,599	86,712	4,801	4,368	3,637	5.2	4.9	4.0
REGION 1	39,913	39,325	39,979	2,638	2,432	2,185	6.2	5.8	5.2
Kittson	2,448	2,389	2,458	180	161	137	6.8	6.3	5.3
Marshall	4,670	4,591	4,788	481	449	366	9.3	8.9	7.1
Norman	3,601	3,505	3,525	219	186	150	5.7	5.0	4.1
Pennington	6,131	6,135	6,099	360	349	294	5.5	5.4	4.6
Polk	14,415	14,116	14,854	936	862	803	6.1	5.8	5.1
Red Lake	1,480	1,476	1,472	207	210	186	12.3	12.5	11.2
Roseau	7,168	7,113	6,783	255	215	249	3.4	2.9	3.5
REGION 2	27,967	28,521	30,527	2,140	1,821	1,899	7.1	6.0	5.9
Beltrami	14,814	14,802	16,810	975	859	915	6.2	5.5	5.2
Clearwater	3,131	3,287	3,323	390	341	328	11.1	9.4	9.0
Hubbard	6,237	6,664	6,509	469	391	382	7.0	5.5	5.5
Lake of Woods	1,614	1,567	1,673	144	93	113	8.2	5.6	6.3
Mahnomen	2,171	2,201	2,212	162	137	161	6.9	5.9	6.8
REGION 4	91,579	91,125	91,870	4,858	4,174	3,801	5.0	4.4	4.0
Becker	12,399	12,699	12,346	1,007	756	740	7.5	5.6	5.7
Clay	24,930	24,724	24,757	792	839	682	3.1	3.3	2.7
Douglas	13,720	13,607	13,769	749	684	576	5.2	4.8	4.0
Grant	2,781	2,700	2,857	180	134	103	6.1	4.7	3.5
Otter Tail	22,914	22,606	22,923	1,391	1,171	1,129	5.7	4.9	4.7
Pope	4,438	4,466	4,553	271	219	211	5.8	4.7	4.4
Stevens	4,990	4,915	5,065	232	161	154	4.4	3.2	3.0
Traverse	2,122	2,105	2,199	86	71	78	3.9	3.3	3.4
Wilkin	3,285	3,303	3,401	150	139	128	4.4	4.0	3.6
REGION 5	53,503	54,552	53,947	4,179	3,595	3,484	7.2	6.2	6.1
Cass	7,642	8,037	7,894	758	679	687	9.0	7.8	8.0
Crow Wing	19,214	19,973	19,262	1,384	1,125	1,106	6.7	5.3	5.4
Morrison	12,280	12,423	12,408	1,023	895	764	7.7	6.7	5.9
Todd	9,811	9,715	9,930	695	615	589	6.6	6.0	5.6
Wadena	4,556	4,404	4,453	319	281	318	6.5	6.0	6.7
REGION 6E	51,259	50,807	52,149	2,596	2,580	2,350	4.8	4.8	4.3
Kandiyohi	17,694	17,645	17,970	868	779	723	4.7	4.2	3.9
McLeod	16,496	16,729	16,469	697	735	592	4.1	4.2	3.5
Meeker	7,977	7,865	8,720	512	544	562	6.0	6.5	6.3
Renville	9,092	8,568	8,990	519	522	453	5.4	5.7	4.8
REGION 7E	47,214	46,916	46,804	3,090	2,640	2,486	6.1	5.3	5.0
Chisago	13,181	13,103	13,161	776	708	600	5.6	5.1	4.4
Isanti	11,300	11,234	11,283	586	449	541	4.9	3.8	4.6
Kanabec	5,428	5,590	5,417	453	376	326	7.7	6.3	5.7
Mille Lacs	8,092	7,992	8,008	521	473	448	6.0	5.6	5.3
Pine	9,213	8,997	8,935	754	634	571	7.6	6.6	6.0
REGION 7W	118,238	115,267	116,509	6,206	5,642	4,955	5.0	4.7	4.1
Benton	13,846	13,408	13,582	772	758	581	5.3	5.4	4.1
Sherburne	16,470	15,949	16,156	971	924	800	5.6	5.5	4.7
Stearns	58,080	56,242	56,974	3,058	2,686	2,256	5.0	4.6	3.8
Wright	29,842	29,668	29,797	1,405	1,274	1,318	4.5	4.1	4.2

* Benton, Stearns, and Sherburne counties

Note: Add employment and unemployment to calculate civilian labor force.

ST. CLOUD MSA NONAGRICULTURAL WAGE & SALARY EMPLOYMENT					
INDUSTRY	EMPLOYMENT			PERCENT CHANGE FROM	
	Oct. 1987	Sept. 1987	Oct. 1986	Month Ago	Year Ago
Total Nonagricultural Wage & Salary	70,984	68,959	67,429	2.9	5.3
Total Manufacturing	11,761	11,666	11,513	0.8	2.2
Durable Goods	6,717	6,679	6,582	0.6	2.1
Nondurable Goods	5,044	4,987	4,931	1.1	2.3
Total Nonmanufacturing	59,223	57,293	55,916	3.4	5.9
Construction & Mining	5,500	5,398	3,887	1.9	41.5
Transp., Comm., & Public Util.	3,605	3,621	3,715	-0.4	-3.0
Wholesale Trade	3,624	3,542	3,215	2.3	12.7
Retail Trade	17,980	17,625	15,897	2.0	6.4
Finan., Insur., & Real Estate	2,495	2,489	2,400	0.2	4.0
Total Services	13,617	13,608	13,592	0.1	0.2
Health Services	4,867	4,865	4,566	0.0	6.6
Government	12,402	11,010	12,210	12.6	1.6

Unemployment Rises, But In St. Cloud, So Does Employment

The St. Cloud MSA's unemployment rate jumped to 5.2 percent from 4.9 in September and 4.0 during October 1986. Last October's unemployment rate was atypically low, sandwiched between rates of 4.2 percent in September and 5.7 percent during November. This summer and fall the St. Cloud MSA's rate hovered between 4.9 and 5.0 percent, not much lower than October's 5.2. Moreover, the MSA's unemployment rate commonly rises in October.

The MSA also gained jobs over the month and year to barely reach another record high of 88,396 jobs. That's 1,684 or 1.9 percent more than last October, and a jump of 2,797 or 3.3 percent since September. The previous high of 88,319 occurred last May.

The MSA's nonfarm payroll employment exceeded 70,000 for the first time in October, reaching 70,984. That's 3,555 (5.3 percent) more payroll jobs than during October 1986, and 2,025 (2.9 percent) additional jobs over the month. Employment usually reaches its zenith in October, but this increase was unusually large. Manufacturing employment rose over the month and year. But not nearly as fast as did nonmanufacturing's.

Among nonmanufacturers, where the significant employment jumps are taking place, construction and mining, trade, and health services gained jobs fastest over the year. Trade, by sheer magnitude, added the most new jobs (1,492). Government employment, which has averaged below year ago levels during most of 1987, rose modestly over the month and year to exceed previous levels.

Only one industry, transportation, communications and public utilities, lost workers over the month and year. That is one reason St. Cloud's economy still appears healthy. Although the historical rapid generation of population and jobs in the MSA has slowed recently, it certainly has not halted or reversed.

Northeast Minnesota

By Ron Daws

Employment Declines As Unemployment Rises

Duluth's unemployment rate rose to 7.3 percent in October, up from 6.5 percent in September and 4.4 percent during October 1986. Meanwhile, employment dropped to 33,402 in October from 33,637 in September and from 34,334 of October 1986. The trend was similar for the rest of Region 3, although in the remainder of St. Louis county unemployment did not rise as much.

Despite October's big jump in unemployment, Duluth's annual average 1987 rate should average only about 6.7 percent compared with 1986's average of 6.0 percent. The reason is that for the first half of 1987 Duluth's unemployment rates were below 1986's.

What little job gain there was in the Duluth-Superior MSA over the year occurred outside of Duluth. Duluth's nonfarm payroll employment fell slightly from last October. Industries losing employment in Duluth were government; construction and mining; finance, insurance, and real estate; and durable goods manufacturing. Nondurable goods manufacturing jobs actually shot up by 17.1 percent over the year, and by 4.1 percent since September. The 21 percent October to October drop in construction employment was largely due to approaching completion of several of Duluth's many building projects.

The two-county MSA at least gained a few jobs since September. With nearly one percent more jobs this October than last October, rising unemployment rates do not necessarily signal an impending recession for the area, especially considering that much of the recent gain in unemployment was heavily associated with the layoff of construction workers whose projects are winding down. However, if those displaced workers are not absorbed into other projects or jobs during the winter, which is unlikely, the area's labor force statistics will not improve until spring.

LABOR FORCE ESTIMATES

AREA	EMPLOYMENT			UNEMPLOYMENT			UNEMP. RATE		
	Oct. 1987	Sept. 1987	Oct. 1986	Oct. 1987	Sept. 1987	Oct. 1986	Oct. 1987	Sept. 1987	Oct. 1986
REGION 3	121,610	123,464	125,364	11,695	11,072	10,329	8.8	8.2	7.6
Aitkin	4,829	4,928	4,985	471	442	378	8.9	8.2	7.0
Carlton	11,085	11,233	11,297	998	874	778	8.3	7.2	6.4
Cook	2,403	2,728	2,397	209	119	127	8.0	4.2	5.0
Itasca	15,836	16,128	16,551	1,512	1,464	1,412	8.7	8.3	7.9
Koochiching	6,796	6,931	7,020	578	491	453	7.8	6.6	6.1
Lake	3,287	3,598	3,582	565	576	850	14.7	13.8	19.2
St. Louis	77,374	77,918	79,532	7,362	7,106	6,331	8.7	8.4	7.4
City of Duluth	33,402	33,637	34,334	2,639	2,352	1,587	7.3	6.5	4.4
Balance St. Louis	43,972	44,281	45,198	4,723	4,754	4,744	9.7	9.7	9.5

Note: Add employment and unemployment to calculate civilian labor force.

DULUTH AND DULUTH-SUPERIOR NONAGRICULTURAL WAGE & SALARY EMPLOYMENT

INDUSTRY	DULUTH EMPLOYMENT			PERCENT CHANGE		DULUTH-SUPERIOR EMPLOYMENT			PERCENT CHANGE	
	Oct. 1987	Sept. 1987	Oct. 1986	Mo. Ago	Yr. Ago	Oct. 1987	Sept. 1987	Oct. 1986	Mo. Ago	Yr. Ago
Total Nonag. Wage & Salary	43,673	43,320	43,815	0.8	-0.3	84,703	85,155	83,940	-0.5	0.9
Total Manufacturing	4,399	4,302	4,070	2.3	8.1	7,380	7,397	7,265	-0.2	1.6
Durable Goods	1,962	1,960	1,989	0.1	-1.4	4,081	4,130	4,205	-1.2	-2.9
Nondurable Goods	2,437	2,342	2,081	4.1	17.1	3,299	3,267	3,060	1.0	7.8
Total Nonmanufacturing	39,274	39,018	39,745	0.7	-1.2	77,323	77,758	76,675	-0.6	0.8
Construction	1,754	2,221	1,890	-21.0	-7.2	3,820	4,369	3,930	-12.6	-2.8
Transp., Comm., Pub. Util.	3,059	2,989	2,907	2.3	5.2	5,498	5,432	5,710	1.2	-3.7
Wholesale Trade	1,685	1,697	1,693	-0.7	-0.5	3,497	3,518	3,539	-0.6	-1.2
Retail Trade	9,233	9,365	9,130	-1.4	1.1	18,507	18,796	18,592	-1.5	-0.5
Finan., Insur., Real Est.	1,812	1,832	1,903	-1.1	-4.8	2,996	3,091	3,190	-3.1	-6.1
Services, Mining, & Misc.	12,024	11,970	11,720	0.5	2.6	24,617	24,612	22,989	0.0	7.1
Government	9,707	8,944	10,502	8.5	-7.6	18,368	17,940	18,725	2.5	-1.8

Southern Minnesota

By Ron Daws

LABOR FORCE ESTIMATES									
AREA	EMPLOYMENT			UNEMPLOYMENT			UNEMP. RATE		
	Oct. 1987	Sept. 1987	Oct. 1986	Oct. 1987	Sept. 1987	Oct. 1986	Oct. 1987	Sept. 1987	Oct. 1986
REGION 6W	23,845	23,565	24,407	1,208	1,083	1,315	4.8	4.4	5.1
Big Stone	2,891	2,887	3,143	153	168	124	5.0	5.5	3.8
Chippewa	6,431	6,311	6,508	291	274	424	4.3	4.2	6.1
Lac Qui Parle	4,081	4,034	4,239	162	115	186	3.8	2.8	4.2
Swift	4,722	4,604	4,777	285	258	319	5.7	5.3	6.3
Yellow Medicine	5,720	5,719	5,740	317	268	262	5.3	4.5	4.4
REGION 8	57,312	55,913	58,842	2,698	2,573	2,306	4.5	4.4	3.8
Cottonwood	5,697	5,290	6,067	455	381	256	7.4	6.7	4.0
Jackson	5,069	5,025	5,821	472	530	390	8.5	9.5	6.3
Lincoln	3,330	3,170	3,333	132	119	111	3.8	3.6	3.2
Lyon	11,669	11,571	11,807	467	422	372	3.8	3.5	3.1
Murray	4,570	4,387	4,613	212	212	167	4.4	4.6	3.5
Nobles	9,867	9,547	9,812	385	342	355	3.8	3.5	3.5
Pipestone	5,086	4,963	5,120	111	127	169	2.1	2.5	3.2
Redwood	7,589	7,559	7,758	291	291	328	3.7	3.7	4.1
Rock	4,435	4,401	4,511	173	153	158	3.8	3.3	3.4
REGION 9	104,089	107,309	105,494	5,098	5,071	4,173	4.7	4.5	3.8
Blue Earth	26,517	26,280	26,104	869	914	867	3.2	3.4	3.2
Brown	12,899	13,178	13,271	604	515	481	4.5	3.8	3.5
Faribault	7,966	8,854	8,408	355	349	334	4.3	3.8	3.8
Le Sueur	10,194	11,922	10,329	891	847	643	8.0	6.6	5.9
Martin	11,565	11,623	12,094	929	956	598	7.4	7.6	4.7
Nicollet	13,985	13,860	13,768	523	502	411	3.6	3.5	2.9
Sibley	6,551	6,607	6,848	371	359	330	5.4	5.2	4.6
Waseca	9,005	9,542	9,107	383	456	308	4.1	4.6	3.3
Watonwan	5,407	5,443	5,565	173	173	201	3.1	3.1	3.5
REGION 10	204,775	206,282	206,004	9,976	8,276	8,516	4.6	3.9	4.0
Dodge	7,307	7,356	6,950	462	407	421	5.9	5.2	5.7
Fillmore	9,510	9,318	9,652	506	457	475	5.1	4.7	4.7
Freeborn	15,732	16,299	16,757	874	635	619	5.3	3.7	3.6
Goodhue	19,265	19,367	19,402	943	906	846	4.7	4.5	4.2
Houston	8,520	8,782	8,964	346	317	331	3.9	3.5	3.6
Mower	16,651	16,747	17,944	790	774	1,168	4.5	4.4	6.1
Olmsted	55,661	55,807	54,836	2,446	1,930	1,730	4.2	3.3	3.1
Rice	25,284	25,458	24,833	1,278	1,054	1,042	4.8	4.0	4.0
Steele	14,172	14,514	13,936	719	598	570	4.8	4.0	3.9
Wabasha	7,954	8,372	8,073	460	366	405	5.5	4.2	4.8
Winona	24,719	24,262	24,657	1,152	832	909	4.5	3.3	3.6
Rochester City	35,005	35,097	34,487	1,724	1,307	1,290	4.7	3.6	3.6

Note: Add employment and unemployment to calculate civilian labor force.

ROCHESTER MSA NONAGRICULTURAL WAGE & SALARY EMPLOYMENT					
INDUSTRY	EMPLOYMENT			PERCENT CHANGE FROM	
	Oct. 1987	Sept. 1987	Oct. 1986	Month Ago	Year Ago
Total Nonagricultural Wage & Salary	57,400	57,528	55,707	-0.2	3.0
Total Manufacturing	10,719	10,682	10,750	0.3	-0.3
Durable Goods	8,713	8,713	8,821	0.0	-1.2
Nondurable Goods	2,006	1,969	1,929	1.9	4.0
Total Nonmanufacturing	46,681	46,846	44,957	-0.4	3.8
Construction & Mining	2,458	2,537	1,967	-3.1	25.0
Transp., Comm., & Public Util.	1,596	1,596	1,550	0.0	3.0
Wholesale Trade	1,307	1,357	1,236	-3.7	5.7
Retail Trade	10,314	10,258	9,973	0.5	3.4
Finan., Insur., & Real Estate	1,567	1,575	1,606	-0.5	-2.4
Total Services	23,565	23,616	22,669	-0.2	4.0
Health Services	16,840	16,775	15,882	0.4	6.0
Other Services	6,725	6,841	6,787	-1.7	-0.9
Government	5,874	5,907	5,956	-0.6	-1.4

Unemployment Rises Over The Month And Year While Employment Is Generally Down

Unemployment rates for Rochester have exceeded those of a year ago for the second straight month. The September to September comparison was 3.4 to 3.6 percent while the October to October disparity was much greater: 3.6 percent to 4.7 percent, equalling the unemployment rate of October 1984. The rise in Rochester's unemployment typified most of Southern Minnesota.

More people also worked in Rochester this October than last October: 35,005 jobs last October compared with 35,097 this October. But employment dropped over the month. Employment typically rises between September and October. Most other counties in Southern Minnesota experienced similar employment losses over the year, although over the month, Regions 6W and 8 generated modest numbers of additional jobs.

In the Rochester MSA (Olmsted county) nonfarm payroll employment moved like total employment did, up over the year and down over the month. The yearly gain was confined totally to nonmanufacturing industries, notably construction and mining (up 491 jobs or 25 percent), health services (up 958 jobs or six percent), and wholesale trade (up 71 jobs or 5.7 percent). Over the year, durable goods manufacturing, other services, government, and finance, insurance and real estate lost jobs. Manufacturing generated a few jobs while nonmanufacturing was a mixed bag with those industries losing jobs slightly overwhelming those that generated them.

Despite October's somewhat atypical unemployment jumps, the area's economies remain nearly unchanged. Rochester's October employment level was a new high for that month. But the trend could change. Rising unemployment rates could begin to cut into jobs. This will have to be watched in the coming months.

The Job Market

By Debra Detrick

Computer And Personnel Services

According to Bureau of Labor Statistics projections, the service producing sector will generate the lion's share of job growth between 1986 and the year 2000. Personnel supply services and computer and data processing services are prime examples of two business services industries with impressive employment gains in recent years and excellent prospects for the future.

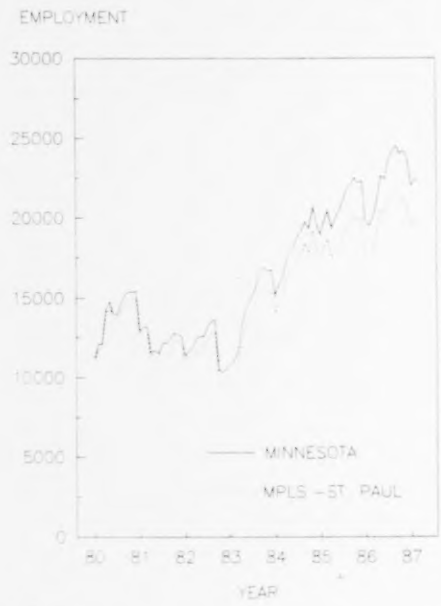
Personnel Supply Services

The industry includes three types of establishments; namely, employment agencies, temporary help firms, and other personnel supply firms such as employee leasing firms. All are classified in Standard Industrial Code (SIC) 736.

In Minnesota, 430 personnel supply firms currently employ about 23,000 workers, or 1.2 percent of total employment. As seen in the following figure, rapid industry growth has pushed employment nearly 65 percent above its 1980 annual average. The employment series also tracks the ups and downs of an industry whose employment often peaks in late fall and ebbs in early winter. During the 1980 to 1987 span, employment reached a high of 24,500 in September 1986 and hit a low of 10,300 in November 1982.

Closer examination of the industry reveals the dominant role of temporary services workers and Twin Cities employers. Temporary help firms make up over half of the total number of personnel supply firms and employ 91 percent of its workers. Employment agencies account for a little less than half of the industry's firms and 8.8 percent of its employment. Most workers (89 percent) are employed by firms in the nine-county Minneapolis-St. Paul area including Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright counties. However, the metropolitan area's share of employment has consistently fallen each year since 1980.

PERSONNEL SUPPLY SERVICES
JANUARY 1980 - MARCH 1987



Source
Employment covered under Minnesota Employment Services Law, Minnesota Dept. of Jobs and Training

In a 1984 Occupational Employment Statistics survey, Minnesota's largest occupations in the industry included general office clerks, stock clerks, hand workers, drafters, miscellaneous service workers, janitors and cleaners, employment interviewers, and secretaries. But, as noted in the Monthly Labor Review, "The temporary field is not limited only to office workers; the market is expanding to include industrial, medical, managerial, and engineering and technical occupations as well."1/

U.S. estimates by the Bureau of Labor Statistics rank the industry as the third fastest growing between 1986 and the year 2000, with employment increasing an average of 4.4 percent per year. It is also expected to gain the fifth largest number of new wage and salary jobs. Much of this job growth will come from the temporary help segment, spurred by employer downsizing,

1/ "Projections 2000: Industry Employment and Output", Monthly Labor Review, September 1987.

subcontracting, general cost cutting, and the desire to avoid hiring permanent employees with fringe benefits, especially if the need for workers is subject to significant seasonal or cyclical changes. Although the need for unskilled office workers will probably diminish, temporary workers with computer, engineering and technical skills are expected to be in increasing demand.

Computer and Data Processing Services

Firms in this industry (SIC 737) supply computer programming and other software services, data processing services, and other computer related services. Companies that rent, lease, repair or maintain computer equipment make up the last category.

Computer and data processing organizations employed an average of 12,000 people in Minnesota between April 1986 and March 1987. Over the same time period, the number of firms in the industry totaled 880. The following figure illustrates how employment has ballooned from a low of 4,300 in January 1980 to a high of 13,600 in March 1987. The sharp rise in January 1984 resulted from a change in the classification of some service industries rather than an actual change in employment. From late 1984 through 1985, employment reflected the slump in computer manufacturing.

The industry's largest number of workers (55 percent) are found in data processing firms, followed by computer programming firms (28 percent), and other organizations supplying computer related services (17 percent). The distribution of employing establishments is somewhat different: 42 percent are in computer programming, 38 percent in other computer related services, and 20 percent in data processing. In recent years, computer programming and data processing organizations have contributed a growing share of total industry employment. Firms located in the Minneapolis-St. Paul area employ over nine out of ten workers.

COMPUTER & DATA PROCESSING SERVICES
JANUARY 1980 - MARCH 1987

Source:
Employment covered under Minnesota Employment Services Law, Minnesota Dept. of Jobs and Training

As of a 1984 Occupational Employment Statistics survey in Minnesota, the largest occupations in the industry were computer programmers, EDP systems analysts, data entry keyers, secretaries, and office clerks.

Future growth in computer and data processing employment is expected to lead all other industries according to Bureau of Labor Statistics projections. Between 1986 and the year 2000, its average wage and salary employment is estimated to rise by 5.2 percent annually. Much of the growth will result from increasing demand for computer specialists due to business and government investment in computer systems and manufacturing techniques. The proliferation of software and personal computer use are examples of this trend. In fact, one of the few limitations on 1990s employment gains may stem not from the demand side, but from a possible shortage of some qualified workers.

SUPPLY/DEMAND FOR SPECIFIC OCCUPATIONS, NOVEMBER 1987

By Mike Casey

	SHORTAGE OCCUPATIONS	SURPLUS OCCUPATIONS
MINNESOTA:	food service workers #, retail clerks, over-the-road truck drivers, clerical (experienced), nursing (RN, LPN, aides)	clerical (inexperienced) #, construction laborers, general laborers #, management trainees
CENTRAL MINNESOTA:	food service workers #, electronic assemblers, over-the-road truck drivers, retail clerks	clerical (inexperienced) #, construction laborers
MINNEAPOLIS-ST. PAUL:	clerical (experienced), food service workers #	construction laborers, general laborers #, management trainees
NORTHEASTERN MINNESOTA:	retail clerks, nursing (LPN, aides), over-the-road truck drivers	clerical (inexperienced) #, construction laborers
NORTHWESTERN MINNESOTA:	food service workers #, over-the-road truck drivers, clerical (experienced), nursing (RN, LPN)	construction laborers, general laborers, clerical (inexperienced)
SOUTHERN MINNESOTA:	food service workers #, retail clerks #, over-the-road truck drivers #, nursing (RN)	clerical (inexperienced) #, construction laborers #, food processors

* Shortage occupations are those that are difficult to fill or go unfilled due to the lack of qualified applicants. Surplus occupations are those in which the number of qualified applicants greatly exceeds the number of openings.

\# This occupation has been listed as a shortage or surplus occupation in at least two out of the last three quarters of the Review.

Research Summaries

By Bruce Steuernagel

What's It Worth?

From time to time the Research Office receives requests for the average income of a person with a college degree or a high school diploma, regardless of that person's occupation. Local data are generally only available from the decennial census of population. More current data are typically available on a national level, and even this data can be several years old.

The Census Bureau has recently published two reports based on results of the 1984 Survey of Income and Program Participation (SIPP) which provide many useful tabulations of educational attainment along with basic measures of economic status such as mean monthly income. The reports also present data on differences between men and women in lifetime labor force attachment, occupation, and earnings.

The first report is entitled, What's it Worth, Educational Background and Economic Status: Spring 1984 (Series P-70, No. 11). Some highlights of this report are:

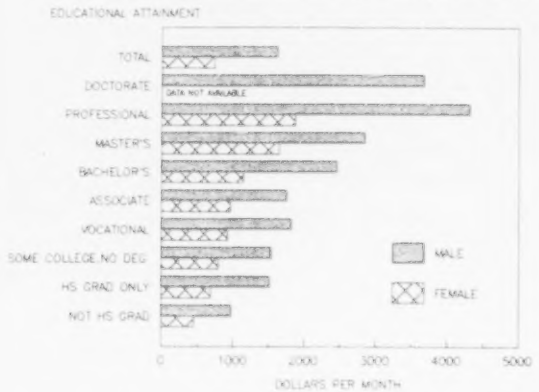
* Over one-half of the adult population (18+ years) reported they had only a high school diploma or had a diploma and had attended, but not received a degree from, a post-secondary institution. Over a fourth of the adult population had not completed high school, while a fifth have obtained a degree of some type beyond high school.

* Twenty-three percent of men held degrees beyond high school compared to 19 percent of women. Twenty-two percent of whites held degrees above high school compared to 11 percent of blacks.

* Educational attainment varies considerably by age group. Among older people (65 + years), 54 percent have not completed high school compared to 26 percent of persons 45-54, and 14 percent of 25-34 year olds.

The following graph shows how mean monthly income varies by level of educational attainment and sex. Mean monthly income is defined as the total income received by the person during the four observation months of the SIPP, divided by four. Income includes wages and salary as well as any other money income, such as pensions, paid benefits, interest, and dividends.

AVERAGE MONTHLY INCOME BY LEVEL OF EDUCATION
MALE AND FEMALE PERSONS 18 YEARS AND OLDER, 1984



The following table shows a ranking of mean monthly income by the field of study for all degree levels. Also shown is the percent of all degree holders who are in that field.

	Field of Degree	Monthly Income	Percent of Persons With Degrees
1.	Law	3,726	2.7
2.	Medicine/Dentistry	3,440	2.7
3.	Economics	2,824	1.4
4.	Engineering	2,707	7.9
5.	Physical/Earth Sciences	2,554	2.3
6.	Business/Management	2,215	19.0
7.	Mathematics/Statistics	2,111	1.7
8.	Agriculture/Forestry	2,110	1.6
	TOTAL ALL DEGREES	1,910	
9.	Police Sci./Law Enforc.	1,809	0.9
10.	Biology	1,718	1.9
11.	Other	1,692	7.1
12.	Social Sciences	1,666	5.4
13.	English/Journalism	1,544	3.1
14.	Psychology	1,543	2.3
15.	Religion/Theology	1,530	1.5
16.	Education	1,526	16.3
17.	Voc. Tech. Studies	1,456	4.5
18.	Liberal Arts/Humanities	1,383	9.0
19.	Nursing/Pharm./Tech. Health	1,299	7.7
20.	Home Economics	1,063	1.2

The second report released by the Bureau of the Census which we would like to highlight is entitled, Male-Female Differences in Work Experience, Occupation, and Earnings: 1984 (Series P-70, No. 10). This report is based on information collected from a sample of approximately 20,000 households. The questions about work experience were asked only of persons 21 to 64 years old. Some of the highlights are:

* Females were much more likely than males to have had a period of time during their adult life when they did not work. Among wage and salary workers 21 to 64 years old, 47.0 percent of the females and 13.2 percent of the males had spent six months or longer without a job.

* Among males, the most common reason for a work interruption was an inability to find work (8 percent). By far the greatest reason for an interruption in females' work history was family responsibility, nearly 41 percent.

* Because females were more likely than males to have had a work interruption, it might be supposed that male-female wage comparisons that are based only on persons who have had no work interruptions might show relatively close levels of earnings. However, data from SIPP show that large wage differences exist even within the group with no work interruptions. Women 21 to 64 years old earned $7.44 per hour, 69 percent of men's earnings.

The Bureau of Labor Statistics has collected some data which give us a rare glimpse at the phenomenon of occupational mobility. The findings in the next column are from a supplement to the January 1987 Current Population Survey. A similar survey was conducted in January 1983.

* The proportion of workers who changed occupations over a year's time, 9.9 percent, was little changed from the 1983 survey.

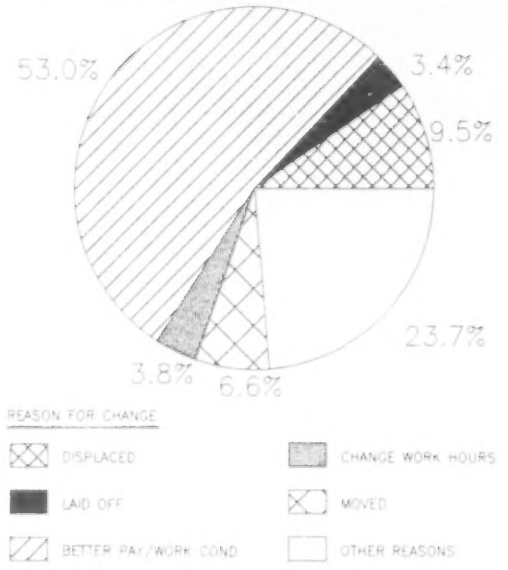
* Younger workers are the most mobile. Nearly 25 percent of persons between the ages of 16 and 24 changed occupations compared to 7.6 percent of those over 25 years of age.

* Compared to their previous job, about half of the adults over 25 who changed occupations had higher pay, 29 percent had lower pay, and 22 percent had about the same pay.

* About 30 percent of men have been with their current employer for 10 years or more, and for females, 21 percent have stayed with the same employer for this long.

* As the pie graph below shows, most people change occupations in hopes of better pay or working conditions. About 13 percent were in different occupations because of job loss. Job displacement (the loss of a previous job because of plant closings or moves, slack work, or the abolishment of their positions), was the reason why a disproportionate number of 35-44 year old men changed occupations.

DISTRIBUTION OF EMPLOYED PERSONS WHO CHANGED OCCUPATIONS BY REASON FOR CHANGE



Forecasts of GNP and Minnesota Payroll Employment

By Charles Cline

Again, present forecasts continue to show downward trends in forecasted growth rates for real GNP and for Minnesota total nonfarm wage and salary employment. These forecasts reflect data through the third quarter, and hence some indirect correlations with the weaker stock market.

The forecasts of real GNP show a first year (1987:4 - 1988:4) growth rate of 5.37 and a second year (1988:4 - 1989:4) growth rate of 2.27 percent. Previous first year growth rates have been 6.23, 7.04, 7.52, 7.79, 7.42 and 7.34 percent from most recent to least recent. Previous second year rates were 3.16, 3.59, 3.90, 4.99, 4.73 and 4.59. In each case, this is the fourth quarter of diminished forecasted growth rates.

The pattern is similar for Minnesota employment. Based on the forecasts in the table, the first year growth rate is 5.11 percent and the second year rate is 3.80 percent. From most to least recent, the previous first year growth rates were 5.62, 6.47, 6.33, 5.48, 5.08 and 5.29 percent respectively. For the second year period, the rates were 4.48, 5.10, 5.59, 6.66, 6.16 and 6.16 percent. This is the third period of decreased growth rates for Minnesota employment over the first year of forecasts and the fourth for the second year of forecasts. The one quarter lag of Minnesota employment relative to real GNP for the first forecast year is in keeping with our previous study of the sensitivity of the Minnesota economy to national economic cycles.

Quarter	Real GNP (Billions of 1972 Dollars)	MINNESOTA PAYROLL EMPLOYMENT, BY QUARTER (In Thousands)								
		Total Nonagricultural Wage & Salary	Mining	Contract Construction	Manufacturing	Transportation, Communications, & Public Utilities	Retail and Wholesale Trade	Finance, Insurance, & Real Estate	Services	Government
Current										
1987:3	3,833.40	1,963.73	7.06	93.98	380.39	98.95	490.12	122.35	474.91	295.96
Forecasts										
1987:4	3,890.13	1,992.03	6.54	88.63	374.93	101.80	493.79	122.14	479.87	324.76
1988:1	3,950.06	1,950.58	5.90	67.30	372.03	99.19	477.45	122.38	477.21	326.72
1988:2	4,007.24	2,026.20	6.76	85.38	382.40	101.73	498.32	125.04	493.94	328.97
1988:3	4,057.53	2,059.60	6.98	100.72	402.36	102.77	506.61	126.96	500.46	304.62
1988:4	4,099.10	2,093.78	6.64	93.80	399.80	106.11	514.24	126.76	506.30	332.98
1989:1	4,134.28	2,045.30	6.23	69.72	396.95	103.40	496.49	126.94	502.89	335.17
1989:2	4,163.60	2,119.45	7.13	87.41	406.08	105.83	517.72	129.61	520.81	337.42
1989:3	4,188.96	2,148.25	7.20	101.88	424.47	106.60	523.34	131.50	525.61	313.84
1989:4	4,212.53	2,173.41	6.77	93.35	417.95	109.40	530.11	131.15	531.10	341.66

Notes

1. These forecasts are produced using the Vector Autoregression Model Developed for Research by Rao Aiyagari.
2. The concept of employment forecasted is that of Nonagricultural Wage and Salary employment. The count represents the number of jobs held since the data is generated from a survey of employer payroll records. Groups included in labor force employment, but excluded here are the self employed, domestics, unpaid family workers.
3. Employment forecasts are seasonally unadjusted values. Real GNP is seasonally adjusted.
4. Forecasts of major industry employment do not sum to the forecast of total wage and salary employment. This is due to random error in the forecasted values.
5. There is great diversity in the accuracy of the forecasts among the major industry divisions, especially mining. More information on their accuracy can be obtained from the author on request.

Feature Article

The Changing Profile Of Minnesota Employers By Size And Industry

By John Tauzell

Introduction

Over the last ten-year period, we find that industry structural changes have modified the size and mix of Minnesota employing establishments. The large firms of 1,000 or more workers no longer rank as the leading employment provider in the state. Now, businesses that employ between 100 and 249 workers represent the largest employer class. We also see a dramatic shift in employment from rural to urban areas. For example, in 1977 there were more employing establishments outside of the Minneapolis-St. Paul Metropolitan Area than within it. But by 1987, the balance shifted so that more of the state's employing establishments are now located in the Metropolitan Area.

This article uses 1977, and 1982 and 1987 data to examine trends affecting employers and employment. The following size of firm, industry and area comparisons summarize some of the key findings.

Size of Firm Changes

Minnesota is predominately a state of small business establishments. In March of 1987, a count of plant locations covered under the Minnesota unemployment compensation law totaled 110,161. Of this number, 73.6 percent employed fewer than 10 workers, and 94.2 percent employed fewer than 50 workers. This large block of employers with fewer than 50 workers, however, employed less than 40 percent of the state's total covered employment. Over 60 percent of Minnesota's covered employment was employed by less than 6 percent of all covered employers.

Although most workers are employed by a small proportion of Minnesota business establishments, there has been a change in the number of large firms employing 1,000 or more people. Between 1982 and 1987, the employer category of 1,000 or more employees declined by 19 establishments, and employment in this large firm category declined by 23,852 workers. The primary reason for the decline is an administrative one as multi-establishment government agencies and school districts changed their reporting practices by reporting each employing establishment location separately instead of combined in a single central office report. Other contributing factors include: firms going out of business, others reducing their work force and dropping to a smaller size class, and business consolidations. This is the only employer size category in which there was a decline in business establishments and employment. The 1000+ employer category dropped from the highest ranking employment provider in 1977 and 1982 to second highest in 1987. Employment in the 100-249 employer size now ranks highest in the state. The 20-49 size category ranks third in employment. Overall, there was a net increase of 11,561 employing establishments and 209,498 in employment between 1982 and 1987.

Minnesota employment grew at a faster rate between 1982 and 1987 (12.8 percent) than between 1977 and 1982 (11.3 percent). However, it should be noted that 1982 was a recessionary year and the growth rate measured from that year is likely to be accentuated on the high side. However, a comparison of the two five-year periods reveals changes that

1/ Covered under the Minnesota Employment Service Law. Approximately 97 percent of the total nonagricultural wage and salary employment was covered by unemployment compensation between 1977 and 1987.

cannot be dismissed because the base year was a recessionary year. Firms that employ fewer than 10 workers grew at a slower pace between 1982 and 1987 than the previous five-year period. The 250-499 size category also grew at a slower rate from 1982 to 1987. Except for the above two size catergories and the 1,000+ size category, all other size categories grew at a faster rate of increase between 1982 and 1987 than in the previous five years. The 50-99 and 100-249 size groups experienced the fastest rate of growth, averaging between 4 and 5 percent per year over the five-year period.

Industry Changes

In the nine major industries shown in Tables 1 and 2 there were a number of economic changes worth mentioning.

Mining, which employed 15,903 in 1977, experienced reductions of 18.5 percent by 1982 and a further reduction of 61.8 percent between 1982 and 1987 due to plant closures and production cutbacks. Total employment in mining was down to 4,948 in 1987.

Construction had a high rate of employment growth (31.6 percent) between 1982 and 1987, rebounding from a low recessionary period in 1982. The small 2.7 percent rate of increase in the number of establishments after the 1977 to 1982 period is the net affect of a decline in the number of construction employers outside of the Minneapolis-St. Paul Metropolitan Area and an offsetting increase in numbers in the Met Area. (See Tables 3 and 4 for more information on the Met Area.) The increase in employment is largely from construction firms throughout the state that have moved into larger employment size categories.

Table 1

Minnesota

Distribution of Covered Establishments by Size of Firm and Industry

Employees per Establishment	Establishments March 1977 Total	%	March 1982 Total	%	March 1987 Total	%
Total	84,761	100.0	98,600	100.0	110,161	100.0
Under 10	63,251	74.6	74,083	75.2	81,127	73.6
10-19	10,083	11.9	11,648	11.8	13,646	12.4
20-49	6,526	7.7	7,546	7.6	8,996	8.2
50-99	2,670	3.1	2,860	2.9	3,473	3.1
100-249	1,493	1.8	1,651	1.7	2,501	1.9
250-499	426	0.5	485	0.5	540	0.5
500-999	178	0.2	190	0.2	210	0.2
1000+	134	0.2	137	0.1	118	0.1
Major Industry Division						
All Industries	84,761	100.0	98,600	100.0	110,161	100.0
Agriculture, Forestry, Fisheries	1,512	1.8	1,807	1.8	2,050	1.9
Mining & Quarrying	183	0.2	196	0.2	198	0.2
Contract Construction	9,916	11.7	11,015	11.2	11,307	10.3
Manufacturing	5,800	6.8	6,742	6.8	7,291	6.6
Transportation, Communications, Public Utilities	4,175	4.9	4,673	4.8	4,991	4.5
Trade	31,946	37.7	35,905	36.4	37,855	34.4
Finance, Insurance, Real Estate	7,353	8.7	8,601	8.7	9,573	8.7
Services	20,228	23.9	25,972	26.4	31,448	28.5
Government	3,648	4.3	3,689	3.7	5,448	4.9

Table 2

Minnesota

Distribution of Covered Employment by Size of Firm and Industry

Employees per Establishment	Employment March 1977 Total	%	March 1982 Total	%	March 1987 Total	%
Total	1,475,429	100.0	1,641,987	100.0	1,851,485	100.0
Under 10	184,648	12.5	213,753	13.0	241,392	13.0
10-19	135,478	9.2	156,203	9.5	183,346	9.9
20-49	198,960	13.5	229,315	14.0	274,406	14.9
50-99	183,275	12.4	196,561	12.0	238,677	12.9
100-249	223,797	15.2	248,557	15.1	307,611	16.6
250-499	144,049	9.7	165,327	10.1	185,493	10.0
500-999	122,363	8.3	131,957	8.0	144,099	7.8
1000+	282,859	19.2	300,314	18.3	276,461	14.9
Major Industry Division						
All Industries	1,475,429	100.0	1,641,987	100.0	1,851,485	100.0
Agriculture, Forestry, Fisheries	8,319	0.6	9,759	0.6	11,450	0.6
Mining & Quarrying	15,903	1.1	12,958	0.8	4,948	0.3
Contract Construction	51,394	3.5	49,544	3.0	65,217	3.5
Manufacturing	326,027	22.1	349,926	21.3	366,766	19.8
Transportation, Communications, Public Utilities	75,342	5.1	81,154	5.0	90,822	4.9
Trade	385,887	26.1	420,764	25.6	473,510	25.6
Finance, Insurance, Real Estate	78,473	5.3	95,366	5.8	115,533	6.2
Services	269,915	18.3	348,126	21.2	431,634	23.3
Government	264,169	17.9	274,390	16.7	291,605	15.8

Over the ten-year period, manufacturing employment has grown slower than any other major industry division except mining. Manufacturing employers and their employment increased between 1982 and 1987, but considerably below the rate of increase experienced between 1977 and 1982. The increase in the numbers of manufacturing establishments came from small firms. Large plant closures, layoffs, and deferred expansions have contributed to the unfavorable trend in manufacturing employment.

Transportation, communications, and public utilities grew in numbers of establishments and in employment. However, these industries, as shown in Tables 1 and 2, employed a slightly smaller share of the state's total employment than in previous years.

Trade is an industry in which employers are increasing in size more than in numbers of establishments. Trade has been and continues to be the largest employing industry in Minnesota. Totaling 473,510 in 1987, trade represents 25.6 percent of the state's total covered employment.

Both services and finance, insurance and real estate are industries where employment is growing at a faster rate than the number of employers. Finance, insurance, and real estate continues to be a strong growth industry with employment increasing around 21 percent in both five-year periods. The services industry is the second largest industry division in the state with employment totaling 431,634, and is growing faster than any other industry. Employment in the services industry increased 29 percent between 1977 and 1982 and 24 percent between 1982 and 1987.

Finally, government shows a modest 6.3 percent employment gain between 1982 and 1987 and totaled 291,605 in 1987 to rank fourth in size of all industry divisions.

Area Differences

The Minneapolis-St. Paul Metropolitan Area added employing establishments and employment at a faster rate than the rest of the state between 1977 and 1987. As of March 1987, approximately 53 percent of the state's firms and 65 percent of the employment was located within the Met Area. This is up from 47 percent and 61 percent, respectively, in 1977.

To some extent, the Minneapolis-St. Paul Metropolitan Area statistics, as shown in Table 3 and 4, are similar to those of the state. Proportionately, there are many more small firms than large firms, and most of the employment is concentrated at the large firm level. Approximately two thirds of 1987 Met Area workers are employed by firms that have 50 or more employees. Also, more people work for establishments of 1,000 or more employees than any other size category.

Outside of the Minneapolis-St. Paul Metropolitan Area, sometimes referred to as Greater Minnesota, 54 percent of the employment is listed with employers of 50 or more workers, and small establishments of less than 10 workers employ more people than any other size category.

The data reveal a significantly large and growing employment disparity between the two areas. In March of 1987 total Minneapolis-St. Paul Metropolitan Area employment at 1,196,475 was almost twice as large as the 655,010 reported for Greater Minnesota. Agriculture and mining are the only industries that have more employment outside of the Met Area than within the Met Area. Both within and outside of the Met Area, trade is the largest employing industry, followed by services. Manufacturing employment ranks third in the Met Area while government ranks third outside of the Met Area.

There is a much smaller disparity in the number of employing establishments between the two areas. The distribution of the state's 110,161 employers in 1987 breaks down to 52.8 percent in the Met Area and 47.2 percent outside the Met Area. The reason for the much smaller disparity in numbers of employing establishments is largely related to the greater number of communities in Greater Minnesota than there are in the Twin Cities Met Area. Each community is served by a basic spectrum of industries which keeps the number of employing establishments relatively high.

In Greater Minnesota, 100 of the largest firms (500+ workers) represent less than than 0.2 percent of the area's employers. They represent 16.5 percent of the area's employment. The number of communities benefiting from jobs created by these 100 large establishments is limited considering the fact that there are approximately 3,100 communities in Greater Minnesota. Small firms, especially those under 10 workers continue to be the core source of employment in Greater Minnesota. They account for 78 percent of all employers in the area and employ more workers than any other size category. However, the rate of growth from 1982 to 1987 compared to the preceding five years has dropped from 11.2 percent to 2.6 percent in numbers of employers and from 9.9 percent to 5.3 percent in employment. Thus, if past trends continue, Minnesota will experience a decline of small businesses outside of the Minneapolis-St. Paul Metropolitan Area and a greater concentration of businesses, employment, and population in the Metropolitan Area.

Inherent in the rural to urban movement are problems such as business failures, worker dislocations, shrinking tax bases, lowered property values, and the inability of small communities to support medical and other services. These problems are expected to continue and possibly worsen in the years to come.

Table 3

Minneapolis-St. Paul Metropolitan Area */

Distribution of Covered Establishments by Size of Firm and Industry

Employees per Establishment	Establishments					
	March 1977		March 1982		March 1987	
	Total	%	Total	%	Total	%
Total	39,485	100.0	48,682	100.0	58,182	100.0
Under 10	27,842	70.5	34,700	71.3	40,731	70.0
10-19	5,029	12.8	6,206	12.7	7,723	13.3
20-49	3,632	9.2	4,414	9.1	5,540	9.5
50-99	1,550	3.9	1,776	3.6	2,256	3.9
100-249	960	2.4	1,039	2.1	1,321	2.3
250-499	259	0.7	323	0.7	383	0.7
500-999	118	0.3	123	0.3	143	0.3
1000+	95	0.2	101	0.2	85	0.1
Major Industry Division						
All Industries	39,485	100.0	48,682	100.0	58,182	100.0
Agriculture, Forestry, Fisheries	522	1.3	651	1.3	858	1.5
Mining & Quarrying	49	0.1	52	0.1	55	0.1
Contract Construction	4,176	10.6	5,012	10.3	5,879	10.1
Manufacturing	3,274	8.3	3,987	8.2	4,430	7.6
Transportation, Communications, Public Utilities	1,471	3.7	1,733	3.6	2,087	3.6
Trade	13,902	35.2	16,513	33.9	18,587	31.9
Finance, Insurance, Real Estate	4,250	10.8	4,967	10.2	5,655	9.7
Services	11,072	28.0	14,912	30.6	19,024	32.7
Government	769	2.0	855	1.8	1,607	2.8

Table 4

Minneapolis-St. Paul Metropolitan Area */

Distribution of Covered Employment by Size of Firm and Industry

Employees per Establishment	Employment					
	March 1977		March 1982		March 1987	
	Total	%	Total	%	Total	%
Total	897,741	100.0	1,031,621	100.0	1,196,475	100.0
Under 10	84,249	9.4	103,461	10.0	125,223	10.5
10-19	67,984	7.6	83,472	8.1	104,110	8.7
20-49	111,840	12.5	135,421	13.1	169,837	14.2
50-99	106,049	11.8	121,446	11.8	154,141	12.9
100-249	144,603	16.1	157,541	15.3	198,480	16.6
250-499	87,235	9.7	110,342	10.7	132,287	11.0
500-999	81,712	9.1	86,340	8.4	99,937	8.4
1000+	214,069	23.8	233,598	22.6	212,460	17.8
Major Industry Division						
All Industries	897,741	100.0	1,031,621	100.0	1,196,475	100.0
Agriculture, Forestry, Fisheries	2,919	0.3	3,326	0.3	4,617	0.4
Mining & Quarrying	457	0.1	708	0.1	606	0.1
Contract Construction	28,586	3.2	31,574	3.0	44,154	3.7
Manufacturing	212,401	23.6	239,431	23.2	246,402	20.6
Transportation, Communications, Public Utilities	50,312	5.6	54,242	5.3	63,313	5.3
Trade	231,296	25.8	258,802	25.1	303,432	25.3
Finance, Insurance, Real Estate	59,532	6.6	71,786	7.0	89,851	7.5
Services	173,185	19.3	227,096	22.0	290,778	24.3
Government	139,053	15.5	144,656	14.0	153,322	12.8

*/ Nine-county area including Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright counties.

Statistical Section

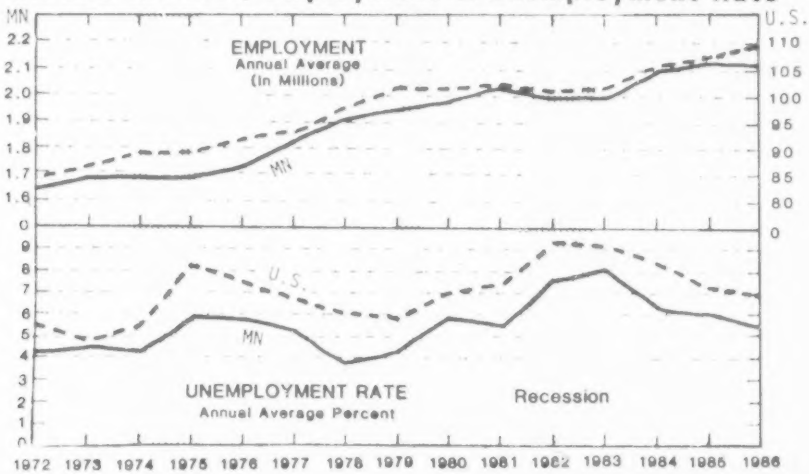
Labor Force Estimates	MINNESOTA (Numbers in Thousands)			UNITED STATES (Numbers in Millions)		
	October 1987	Change From Last Mo.	Change From Year Ago	October 1987	Change From Last Mo.	Change From Year Ago
Civilian Labor Force	2,253.8	13.2	10.5	120.7	0.9	2.0
Employed	2,142.4	5.3	-8.8	113.9	0.9	3.0
Unemployed	111.4	7.9	19.3	6.8	0.0	-1.0
Unemployment Rate						
Actual	4.9	0.3	0.8	5.7	0.0	-0.9
Seasonally Adjusted	6.0	0.3	1.0	6.0	0.1	-0.9

* Components may not add to Civilian Labor Force due to rounding.

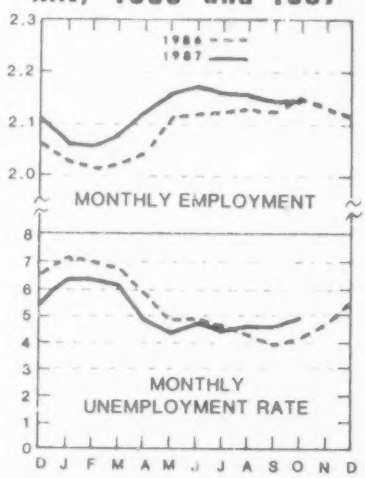
Historical Labor Force Series

Year	Minnesota (Annual Average in Thousands)				United States (Annual Average in Millions)			
	Labor Force	Employment	Unemployment Number	Unemployment Rate	Labor Force	Employment	Unemployment Number	Unemployment Rate
1970	1625.0	1557.0	68.0	4.2	82.8	78.7	4.1	4.9
1971	1664.0	1592.0	73.0	4.4	84.4	79.4	5.0	5.9
1972	1704.0	1630.0	73.0	4.3	87.0	82.2	4.9	5.6
1973	1766.0	1686.0	80.0	4.5	89.4	85.1	4.4	4.9
1974	1769.0	1691.0	77.0	4.3	91.9	86.8	5.2	5.6
1975	1790.0	1684.0	106.0	5.9	93.8	85.8	7.9	8.5
1976	1850.0	1740.0	109.0	5.9	96.2	88.8	7.4	7.7
1977	1909.0	1811.0	98.0	5.1	99.0	92.0	7.0	7.1
1978	1979.0	1903.0	76.0	3.8	102.3	96.0	6.2	6.1
1979	2039.0	1954.0	85.0	4.2	105.0	98.8	6.1	5.8
1980	2111.0	1985.0	125.0	5.9	106.9	99.3	7.6	7.1
1981	2154.0	2035.0	119.0	5.5	108.7	100.4	8.3	7.6
1982	2167.0	1998.0	170.0	7.8	110.2	99.5	10.7	9.7
1983	2176.0	1998.0	178.0	8.2	111.6	100.8	10.7	9.6
1984	2227.0	2086.0	141.0	6.3	113.5	105.0	8.5	7.5
1985	2221.0	2088.0	133.0	6.0	115.5	107.2	8.3	7.2
1986	2213.0	2095.0	118.0	5.3	117.8	109.6	8.2	7.0

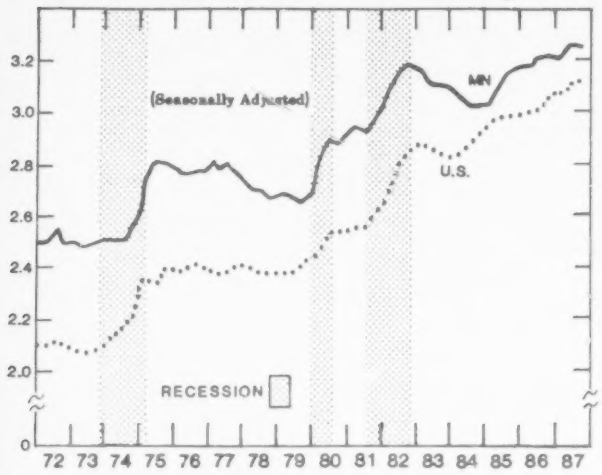
MN and the U.S., Employment & Unemployment Rate



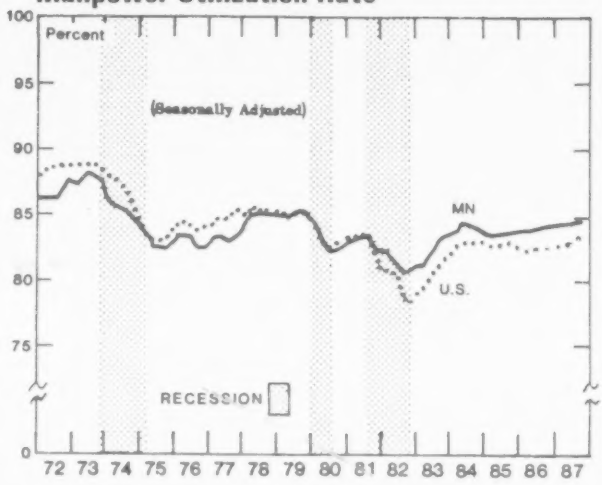
MN, 1986 and 1987



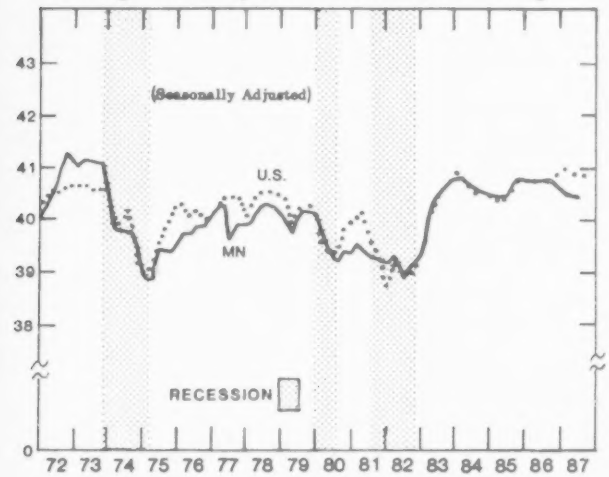
Ratio of Services to Goods Producing Jobs



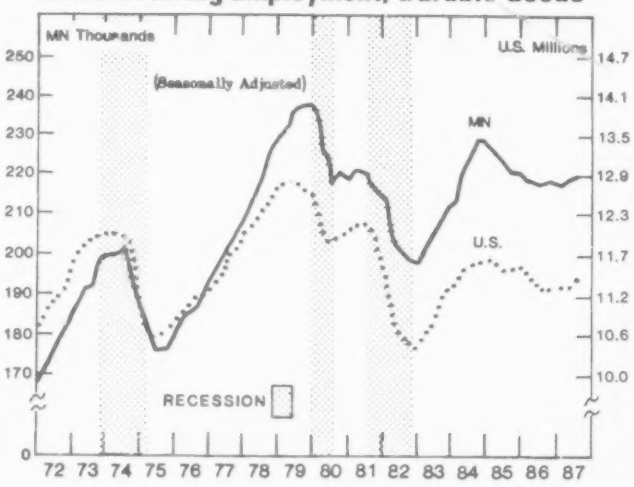
Manpower Utilization Rate



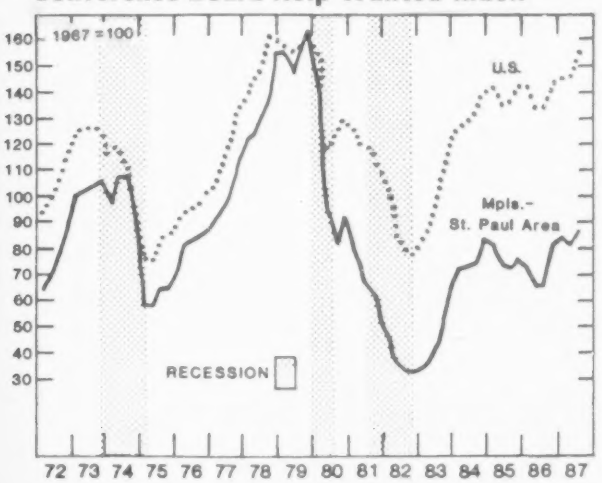
Average Weekly Hours, Manufacturing



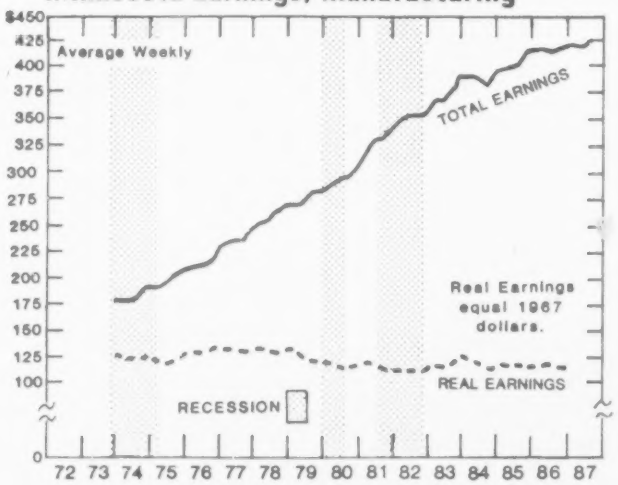
Manufacturing Employment, Durable Goods



Conference Board Help Wanted Index



Minnesota Earnings, Manufacturing

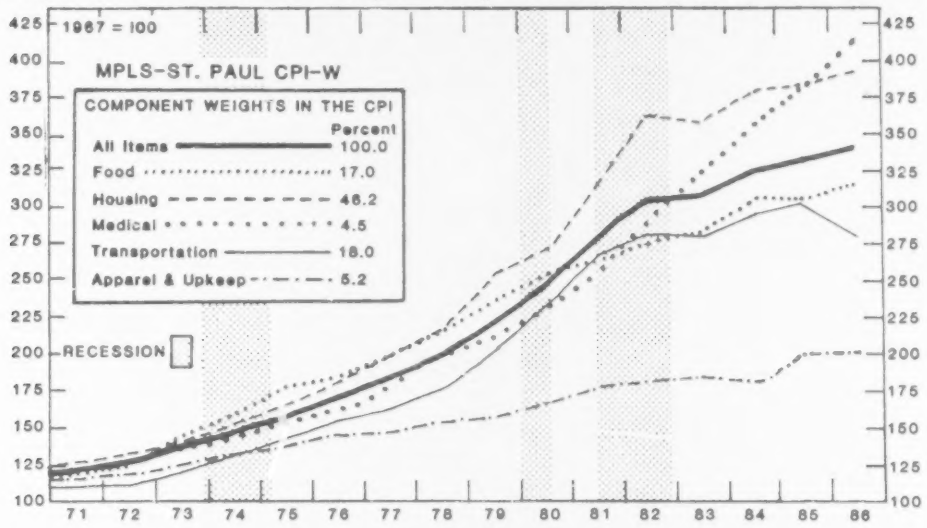


Unemployment Insurance Claimaints in Minnesota

Characteristics	THIRD QUARTER 1987			OCTOBER 1987			
	Number	Percent Change From		Number	Percent Change From		Percent Long Term
		Last Qtr.	Year Ago		Month Ago	Year Ago	
By Age & Sex							
Male	14,152	-35.5	-20.5	12,712	0.3	-23.1	21.1
Under 45	10,589	-35.4	-20.8	9,585	1.4	-22.7	19.6
16-24	1,547	-42.4	-27.5	1,466	8.2	-29.6	13.5
25-34	5,422	-35.0	-17.9	4,915	2.7	-18.8	20.1
35-44	3,620	-32.5	-21.8	3,204	-3.3	-24.9	21.7
45 and Over	3,563	-35.9	-19.8	3,127	-2.8	-24.5	25.7
45-54	2,101	-34.4	-17.0	1,871	-1.3	-21.2	24.3
55 and Over	1,462	-37.9	-23.7	1,256	-4.3	-28.8	27.7
Female	10,753	-1.4	-9.9	8,573	-8.9	-8.1	28.1
Under 45	7,756	-1.8	-11.9	6,357	-7.5	-8.2	26.4
16-24	1,105	-13.7	-28.2	962	-4.3	-23.0	17.7
25-34	3,825	-1.3	-9.0	3,117	-7.8	-5.9	28.0
35-44	2,826	2.9	-7.7	2,278	-8.2	-3.6	27.8
45 and Over	2,997	-0.3	-4.0	2,216	-12.8	-7.7	33.0
45-54	1,793	1.0	0.7	1,370	-11.8	-2.1	30.9
55 and Over	1,204	-2.2	-10.2	846	-14.5	-15.7	36.5
By Industry	24,905	-24.2	-16.3	21,285	-3.6	-17.7	24.3
Ag., For., Fish.	247	-36.3	-13.9	257	10.8	-10.5	11.9
Mining	305	-68.1	-83.9	123	-26.3	-94.4	35.8
Construction	2,986	-54.5	19.4	3,209	13.8	31.8	9.2
Manufacturing	6,910	-30.5	-26.7	5,696	-4.5	-27.2	28.4
Pub. Utilities	1,171	-27.1	-6.5	937	-1.4	-10.2	25.1
Wholesale Trade	1,789	-14.1	-16.7	1,571	-8.1	-16.7	26.8
Retail Trade	3,241	-15.1	-15.6	2,625	-6.7	-19.2	27.5
Fin., Ins., Real Est.	1,175	21.4	25.1	1,235	-0.3	45.8	25.2
Services	6,156	11.0	-5.7	4,659	-11.9	-6.8	28.9
Public Admin.	478	-6.3	-2.2	612	26.7	-8.0	18.5
Inf. Not Available	447	-4.1	3.0	361	-13.6	-15.3	0.5
By Occupation	24,905	-24.2	-16.3	21,285	-3.6	-17.7	24.3
Prof., Tech., Mgr.	6,254	10.4	-3.8	5,221	-9.3	-1.6	31.5
Clerical	3,914	4.9	-8.5	3,365	-8.1	-6.1	27.3
Sales	1,305	-9.2	-19.7	1,166	-4.5	-18.2	26.9
Services	1,938	-6.7	-14.6	1,628	-1.5	-17.5	22.2
Farm., For., Fish.	169	-53.7	-3.4	232	48.7	-3.7	6.6
Processing	1,106	-32.7	-11.8	831	1.6	18.7	43.4
Machine Trade	1,473	-30.6	-24.2	1,218	-7.6	-34.8	22.1
Benchwork	2,236	-28.0	-30.4	1,745	-7.5	-30.8	25.8
Structural Work	3,500	-53.4	-3.6	3,552	11.6	-0.4	10.4
Misc.	2,851	-43.2	-39.3	2,178	-4.6	-52.0	19.8
Inf. Not Available	159	-6.5	0.6	149	2.8	-1.3	31.8
By Duration	24,905	-24.2	-16.3	21,285	-3.6	-17.7	-
0-14 Weeks	18,844	-19.6	-14.4	16,113	-1.3	-19.2	-
15+ Weeks (Long-Term)	6,061	-35.6	-21.5	5,172	-10.3	-12.7	-

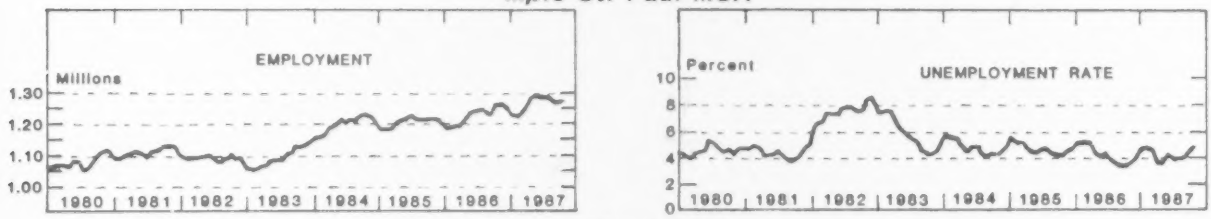
The above table includes data on those claiming benefits from the regular state program. Federal employees and veterans are excluded, and recipients of benefits from extended programs are reported only when those programs are in effect.

Consumer Price Index–Major Components *(Annual Averages)*

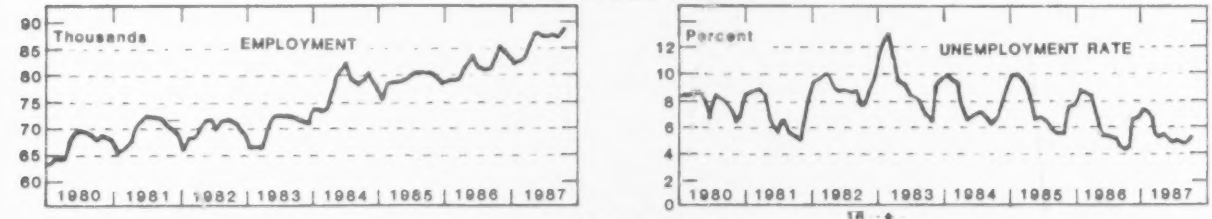


Employment and Unemployment Rates for MN Metro Areas

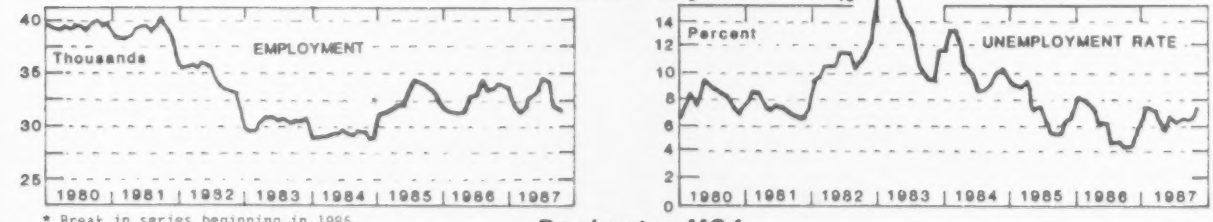
Mpls-St. Paul MSA



St. Cloud MSA

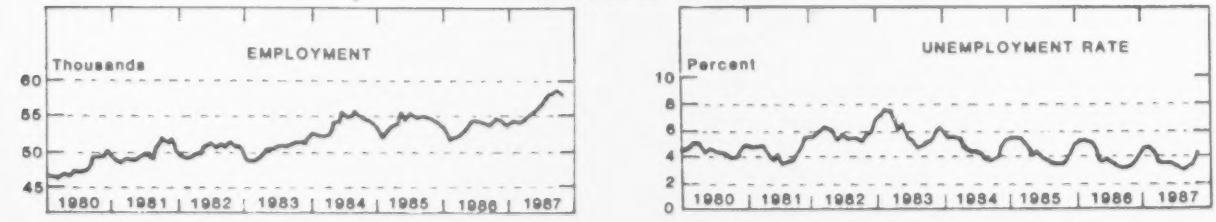


Duluth City



* Break in series beginning in 1985.

Rochester MSA

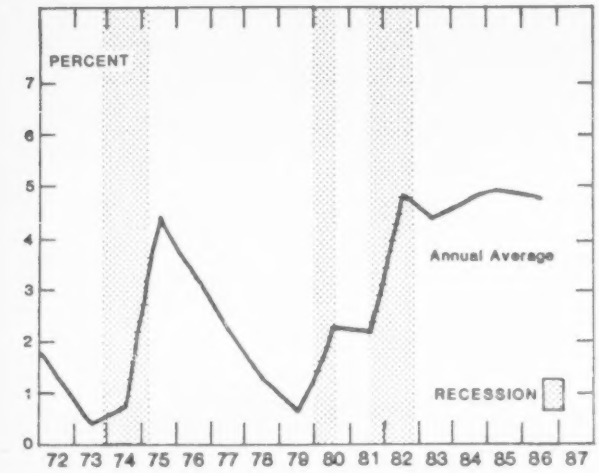


National Spending, Output, Income, and Prices

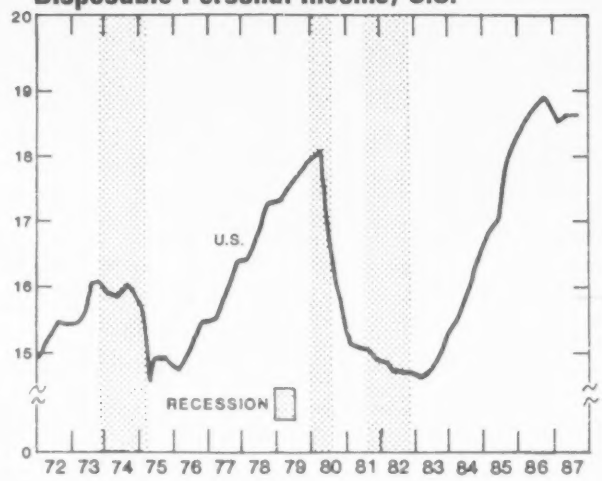
Type of Economic Activity	United States		
	III QUARTER 1987	Percent Change from	
		Last Qtr.	Year Ago
Spending and Output			
Gross National Product (in Billions of 198< Dollars)	3,831.2	0.9	3.0
Personal Consumption Expenditures	2,517.0	1.2	1.6
Durable Goods	403.3	4.6	-0.5
Nondurable Goods	878.4	-0.1	-0.2
Services	1,235.4	1.0	3.6
Gross Private Domestic Investment	676.5	0.4	4.9
Nonresidential, Fixed	461.8	5.5	5.5
Residential, Fixed	196.7	-0.1	-2.2
Net Exports	-137.9	#	#
Government Purchases	775.5	1.1	2.4
Federal	338.3	1.7	1.7
State and Local	437.3	0.7	3.0
Current Federal Budget Surplus (Deficit) 1/	-137.2	-139.2	-203.7
Current Federal Budget Surplus (Deficit) as % of GNP 1/	3.0	3.1	4.8
Retail Sales (in millions of dollars)	128,363	2.4	3.7
Industrial Production (Base Year - 1977)	130.9	2.1	5.0
Housing Starts (Annualized in Thousands)	1,622	0.6	-7.7
Plant Utilization Rates	81.5	1.2	2.4
New Orders - Durable Goods (in millions of dollars)	108,172	0.4	n.a.
Income and Credit			
Total Personal Income (in billions of dollars)	3,759.7	1.4	5.8
Total Disposable Personal Income (in billions of dollars)	3,193.5	2.0	5.1
Per Capita Personal Income			
Current Dollars	15,410	1.1	4.9
1967 Dollars	4,568	0.0	0.6
Median Family Income - Family of Four (in dollars)	n.a.	n.a.	n.a.
Poverty Threshold for Family of Four (in dollars)	11,200		1.8
Average Weekly Earnings of Production Workers in Mfg.	403.60	0.2	2.2
Money and Credit			
Money Supply (M2) (in billions of dollars)	2,861.4	0.7	5.3
Federal Reserve Discount Rate	5.65	2.7	-3.1
Prime Rate Charged by Banks	8.40	4.3	7.0
Consumer Installment Credit as % of Disp. Pers. Income	18.7	0.0	0.5
Prices			
Consumer Price Index (All Urban Consumers)	342.6	1.1	4.2
Food	325.6	0.5	3.7
Housing	374.3	1.4	3.3
Apparel	215.8	-0.6	4.1
Transportation	319.7	1.5	5.6
Medical Care	466.0	1.5	6.6
Personal Care	300.9	0.8	3.1
Producer Price Index	310.4	1.1	4.4
Finished Goods	293.4	0.7	3.7
Raw Materials	307.7	2.1	11.1

Percent change not applicable
1/ Represents values - not percent change.

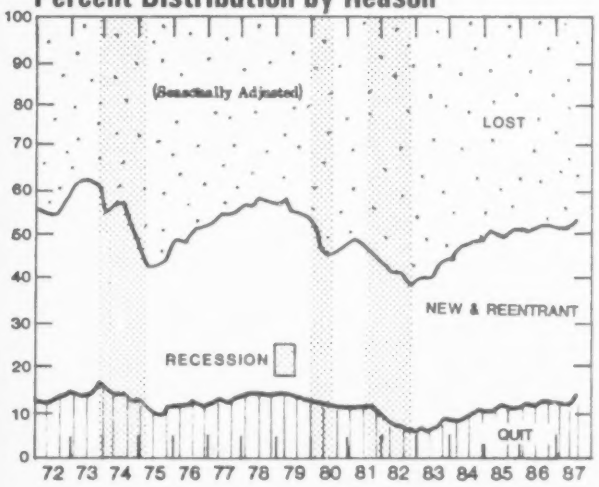
Federal Deficit as % of GNP (Current Dollars)



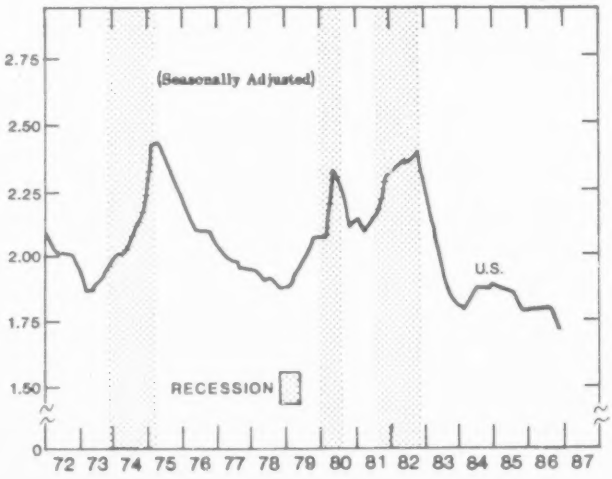
Ratio, Consumer Installment Debt to Disposable Personal Income, U.S.



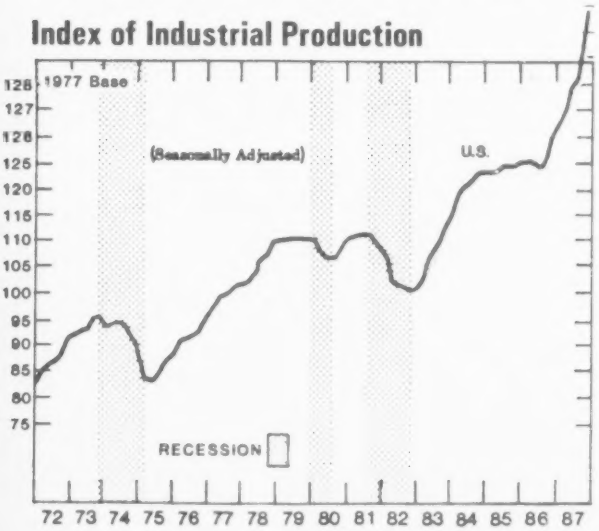
U.S. Unemployment: Percent Distribution by Reason



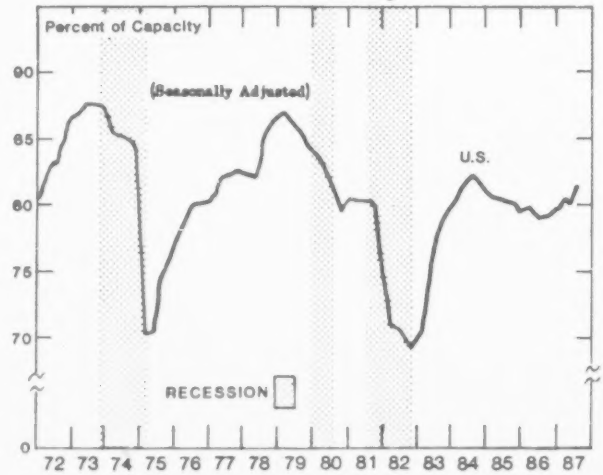
Ratio, Inventory to Sales, Durable Mfg.



Index of Industrial Production



Plant Utilization Rates, Mfg.



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Minnesota Employment and Wages by County (Fourth Quarter 1986) Limited number available for 1975-1985

Average Covered Employment & Wages by Economic Region for the Calendar Year 1986 by Two Digits of Industry (also available for 1976-1985)